

# Amazing

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by Frank Herbert

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*Classic Reprint:*

EUTHANASIA LIMITED  
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Featured in March **FANTASTIC**

# Rx

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3 gallans of gasoline daily—  
Oil 2 times a week, 3 times during unusually  
active week—  
Na other faad ar drink—  
Tender, laving care  
CAUTION: NEVER, but never let rabat came  
in cantact with water (rust, you know)

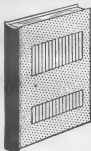
But what happens when a rabat doesn't get  
his gasoline? This one went on a rampage—  
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# Amazing

Fact and Science Fiction Stories

MARCH, 1962

Vol. 36, No. 3

REG. U. S. PAT. OFF.

"FIRST IN SCIENCE FICTION SINCE 1926"

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## EDITORIAL



*It's a privilege to yield the lectern this month to a guest editorialist of no mean persuasive power, Robert Bloch. Bob, you're on:*

ACCORDING to the Old Testament, God created the world in six days and six nights, and on the seventh day He rested.

Luckily, all this happened some while back. If He tried the same stunt now, He'd get in trouble with the unions.

You just don't mess around with the concept of the 40-hour week today, and even at time-and-a-half or double-time, it isn't considered good policy to work quite that fast. Besides, there are all kinds of specialized jobs which are protected and can't be infringed upon by outsiders. Now I'm not saying that the unions are unreasonable; chances are, they'd be perfectly willing to get together with God and even sit down at a conference table to work things out if they could spare the time. It might be

that they would come up with a fair and equitable deal, with due allowance for stand-by crews and a little featherbedding and fringe benefits, to say nothing of paid vacations, automatic wage-increases and coffee-breaks.

Management would have to get in on the act, too; after all, the price of equipment and raw materials must be considered, and investment capital is entitled to a percentage of the profits.

All things considered, I believe it's safe to assume that God would run into definite problems if He planned on duplicating that world-making routine today. And certainly, those problems confront anyone else who plans on making a world, or even destroying one.

Now a writer, of course, has an easier time of it.

Give any writer of science fiction a piece of paper and a pencil and he can create or obliterate a world, or even an entire universe, in fifteen minutes, flat. And sometimes it is pretty flat.

But the results often enchant a fair number of readers, who thereupon speculate as to why the same effect cannot regularly be achieved in other media, such as motion pictures and television.

I can only refer such readers to my remarks about the problems which God would encounter. I must also remind them that the average motion picture or television producer isn't God (no matter what *he* thinks) and that costs have risen appreciably for mere mortals since the good old days back in Sodom and Gomorrah. In terms of pure economics then, the worst that could befall a solid citizen like Lot was to look back and see his wife turn into a pillar of salt. Nowadays, every time I look back, I see my wife turn into a super-market and come out with a bill for \$40 worth of groceries.

So let's face it; science fiction movies are usually too expensive to produce nowadays. Good science fiction movies, that is.

I'VE already expressed myself in the past upon the *bad* science fiction movies, which are largely the reflection of the intellectual and aesthetic limitations of their producers. But since coming to the cinema citadel, I've been made increasingly aware of the fact that there are men out here who would like

to put quality science fiction on the screen—and they are stymied by economics.

It's largely a matter of space and time.

Once again, here are matters which science fiction *writers* handle easily—all they need is the same standard equipment, paper and pencil, to cope with space and time in the abstract.

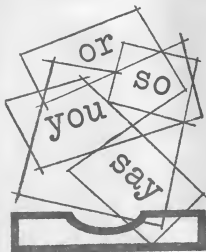
Yet in the concrete—the concrete streets and concrete soundstages of the studios—space and time present insuperable obstacles to achievement. Both cost too much money.

Back in the Twenties it was possible for Fritz Lang to produce his *Metropolis* at relatively small expense; a Germany suffering from postwar depression offered government-subsidized space and production facilities and hordes of extras at little cost. A similar situation existed in England during the Thirties when *Things To Come* was filmed.

But since the coming of the Four Horsemen (War, Inflation, Unionization and Fixed Overhead) such opportunities no longer exist.

It is still possible to make "spectacles" for considerably less money in Europe—but, significantly, almost all of these epics deal with war or a military background. There's no trick to hiring a lot of extras and outfit-

(Continued on page 141)



Dear Editor:

In Isaac Asimov's recent article on SF in the NEW YORK TIMES MAGAZINE two of your covers were used. They were used as prime examples of the old and new in science fiction. I feel that this reflects the fine quality of your magazine.

William Gibson  
415 First St.  
Wytheville, Va.

• *We agree—no one was more pleased to see them. We made our files available to the Times and permitted them to choose any cover(s) they wished to illustrate Isaac's story.*

Dear Editor:

I have been reading your mag-

azine since the big changeover and feel the need to make some comments. In spite of Moskowitz's calling every story a classic, the Classic Reprints have little value other than "period pieces" that are indicative of the writing in that period. "The Hungry Guinea Pig" is typical in that it weaves scientific double talk, that blithely ignores such things as the square-cube law, into a rapid-paced story. Recently I bought a set of old ASTOUNDINGS and began reading from January, 1930. Most of the stories were poorly plotted and worse-written, and the remainder had value only in their novel ideas. In the later thirties, ASTOUNDING was supposed to be the leader in the field, yet the stories in it were mainly melodramatic space operas whose saving grace was the new and fantastic concepts presented.

I think that the "good old days" of Science Fiction were good in that the readers of that time were sufficiently young and uncritical not to worry about such things as believable characters and plot, and scientific credibility. The new concepts were what mattered.

Looking at the November issue of AMAZING, what improvement do we note? "Counter Psych" is a blood and thunder

(continued on page 143)



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# MINDFIELD!

By FRANK HERBERT

Illustrated by FINLAY

*Major George Kinder didn't know his name, nor his country, nor his time. He was a blank, scooped up out of the distant past. Yet he posed a threat of catastrophe to a world he never made.*

## PROLOGUE

IN the *kabah* room another Priest failed.

It was dark in the room, which is like saying the ocean is wet. *Kabah* darkness is like no other in the universe. All radiation can be suppressed here to form a backdrop for precise inhibitory

delta waves and shaped gammas.

Personality carving, it's called. Mottled hums came from this dark, grit sounds without source-point.

The failure Priest approached death. He had been negative-thinking, permitting his accident-prayer to well up through the boundary from unconscious





to conscious. In some Priests this prayer could grow too strong for Ultimate Conditioning to overcome without introducing cellular destruction into the brainpan.

But *kabah* could not kill. It could shape and twist at a sub-molecular level, but not kill. Only one solution to such an obstinate mind remained for *kabah* programming: the Priest's mind was flooded with blankness, a cool wash of nothing.

More sound trickled through the room—metallic scrapings, sharp ozone crackles without light. The failure Priest moved nearer death. Metal arms swung out where dark sensors directed, slipped the Priest into a rejuvenation tank. The tank sloshed as the body entered. The metal arms fitted caps, electrodes, suppression plates to the jesh.

Soon, a signal light would be activated, but first one more task remained. A name. It must be similar to the old name, but not near enough to rasp raw places in the dead past. And there was much dead past in this one. Many names to avoid.

Circuits flickered, settled on a single optimum sound combination. Printer styli buzzed, graved the name on the sealed rejuvenation tank: "Saim."

Outside the *kabah* room, the signal light glowed amber. Another human would see it pres-

ently, and come to wheel out the tank. Some Family would have another adult-sized "child" to raise and train.

In all this world there were only children such as this. And in every *kabah* room, on every priestly census scroll, all the names were listed. Not many names remained, but they were listed.

All names, that is, except one. His name was George.

**M***Y name is George, he thought. I must hang onto that.*

He felt shifting motion beneath his back, bands across his chest and legs holding him to a stretcher. He heard the whistling of a turbine, the ear-thumping beat of rotors. He sensed night somewhere beyond the pale yellow dome light above him.

*We're flying, he thought.*

But then he couldn't be quite sure what *flying was...*

There had been a long time. He sheered away from thinking about how long a time. It was like a chasm.

And strange people.

And a tank that sloshed and gurgled around him, making weird tickling demands upon his nerves. Yes, there'd been a tank. That was definite.

A woman's face looked in upon him, obscuring the yellow dome

light. She turned away, and he heard her voice: "He's awake, Ren."

A name went with the woman—*Jeni*. And a physical appearance—moonfaced, young with blonde hair in two long braids, blue eyes with light creases at the corners. She wore an odd gray robe with yellow flecks in its weave. The robe meant something. *Oh, yes—she's of the Wist Family.*

A masculine voice answered the woman: "Does he seem to be all right?"

"Yes."

The masculine voice was Ren. He was a doctor. A dark man with almond eyes and flat features. His cerise flecked robe meant Chi Family.

"Just keep an eye on him," said Ren. "See that he stays quiet."

*My name is George.* It was a thought like a vague handhold in darkness. *Could this be brain-washing?* he wondered.

But again he couldn't find meaning for a word. All he could think of was running water from a faucet and something foaming in a basin. *Washing.* And there were two languages in his head. One was called Haribic and came from the Educator. The other was called, in Haribic, *Ancienglis*, and this language came from . . . He sheered away. That was the chasm of Time

*Ancienglis* was easiest, though. *Washing,* he thought. *And faucet. And basin. And Educator.*

Educator was electrodes and ear caps and eye caps and hummings and jiggings and shakings in his mind like the rattling of dice in a cup. And passage of time.

Time.

It was like thunder in his mind.

*My name is George,* he thought.

UNCLE, the situation's desperate," said Saim. "There's danger more terrible than . . ." He shook his head, thinking that nothing in their world quite came up to a comparison.

"Mmmmmhmmmm," said ó Plar. He turned in his fan-backed oak chair, stared out the triangular window at the water rhythm garden with its cymbaline floats tinkling in the filtered morning light. Their music was pitched to a level that could be ignored here in the Regent Priest's private office. ó Plar swung back to face his nephew. Saim straightened, standing almost at attention like any other suppliant.

ó Plar considered Saim, watching him, avoiding for a moment the crisis that now could not be avoided. He saw a few more character lines in the young face.

The thin features, blonde hair and light eyes dominated a weak chin. A beard would cover the chin, though, if Saim survived Ultimate Conditioning another time . . .

"Uncle, you must believe me," said Saim.

"So you say," said ó Plar. He caressed the polished surface of his staff—a long tube of metal with crooked top. His hands never strayed far from it. The staff leaned now against its slot on the edge of the desk. ó Plar tapped the metal as he spoke.

"These records you've discovered—you say they refer to many caves scattered around the world, each with its complement of . . . I believe you called them rockets."

"Weapons, Uncle. Thousands of them! We found pictures Weapons more terrible than you can imagine."

"Mmmmmhmmmm," said ó Plar. And he thought: *The young fool! He keeps hitting the most sensitive inhibitions! Well, he's in for it now. I can't help myself.*

ó Plar took a deep breath, said: "Tell me how you found these records."

Saim dropped his gaze. Fear touched him. After all, this was the Regent Priest.

"Was it by digging?" asked ó Plar.

Saim shrugged, thought: *He knows we've profaned the earth.*

"Where is man's place?" demanded ó Plar.

Saim spoke with a resigned sigh: "Man's place is among the growing things on the blessed surface of Mother Earth. Neither in the sea below nor in the sky above, nor in caverns beneath. To the sea, the fishes. To the sky, the birds. To the earth's surface, man. Each creature in his place."

ó Plar nodded, tapped his staff against the floor. "You recite it well, but do you believe it?"

Saim cleared his throat, but did not speak. He sensed an abrupt tension in the room, glanced at the staff in ó Plar's hand.

ó Plar said: "You cannot plead ignorance. You know why man must not dig in the earth except where the Council or a Priest-Historian such as myself has sanctified both diggers and ground."

Saim clenched his fists, unclenched them. So it had come to this.

"You know," said ó Plar. "You've seen me come from Ultimate Conditioning with the Lord's force strong upon me. You've seen Truth!"

Saim's lips thinned. *What was that old saying?* he asked himself. *Yes: In for a penny, in for a pound.*

"I know why," said Saim.

"But it's not because of your holy rigamarole." He ignored the frozen look on ó Plar's face, said: "It's because back in the Lost Days people who dug in the ground accidentally set off some of these weapons. They reasoned that the region below the earth's surface was prohibited. And we're left with a law that grew out of accident and legend."

*No help for him now*, thought ó Plar. He said: "That would not be reasonable. And the Lord Buddha has ordered things in a reasonable way. I believe it's time to teach you this with some discipline."

Saim stiffened, said: "At least I tried to warn you."

"In the first place," said ó Plar, "there may be a few such weapons as you've described, but time is sure to have destroyed their working parts."

"Thousands of them," said Saim. "Each sealed in a giant container of inert gas. Each ready to destroy." He leaned forward. "Will you at least look at the evidence?"

ó Plar's voice grew sharper. "No need, young man. You could manufacture any evidence you needed."

Saim started to speak, but ó Plar cut him off.

"No! You came here to get me to stop the Millenial Display. You presumed to use our relationship for . . ."

"Of course I want you to stop that display!"

"But you did not tell me why."

"I did."

"Let's look at it reasonably," said ó Plar. "Under the guidance of the Blessed Priests, mankind has grown out of its violent childhood. We've enjoyed almost a thousand years of tranquility. Just ten days now to the Millenial Display. Just ten days—and suddenly you've found a reason to stop that display."

"You must stop it," pleaded Saim.

"What harm can a few fire-works do to our people?" asked ó Plar.

"I don't have to tell you that," said Saim. "We've never seen such things. We're conditioned against all violence. I don't even see how you could force yourself to arrange such a display. The inhibitions . . ." He shuddered. "Loud noises, great flashes of light in the night sky. There'll be a panic!"

*So perceptive*, thought ó Plar. *This one was always so perceptive*. He said: "We but remind people in a relatively mild way how things were in ancient days."

"Madness and panic," said Saim.

"A little, perhaps," said ó Plar. He stilled the trembling of his left hand by gripping the staff. "The important thing is

that we'll create public revulsion at the things you young rebels are preaching."

"Uncle, we . . ."

"I know what you're saying," said ó Plar. "Revive all the sciences of the Ancients! Expand to other planets! Expand! We don't even fill our present living space!"

"Uncle, that's just it." Saim felt like getting down on his knees. Instead, he leaned on the desk. "Mankind's dying out. There's no . . ." He shook his head ". . . no drive, no motive power."

"We're adjusting to the normal requirements of our Mother Earth," said ó Plar. "Nothing more. Well, we're going to show the people what it is you preach. We'll give them a display of ancient science."

HAVEN'T you heard anything I said?" pleaded Saim. "Your display will set off a panic. It'll be like a wave of fear following the line of darkness around the world. And the old weapons . . . they're all set to detect that wave. Fear at a critical volume sets off the weapons!"

ó Plar could feel the pressure of his own conditioning—so much more terrible and constricting than any pressures felt by the common herd. *If they only knew . . .*

"So you've stumbled onto a

place of the Elders," said ó Plar. "Where is that place?"

Saim's lips remained closed. He could feel an emotion tugging at him. *Anger?* He tried to remember the angers of childhood, but couldn't. The conditioning was too strong.

ó Plar said: "We'll find the place you profaned whether you tell us its location or not."

"Get it over with," said Saim. And the sorrow he felt brought dampness to his eyes.

"I will," said ó Plar. He hesitated, sharing Saim's sorrow. But there was nothing else to do. The requirements of the moment were clear to both of them. "There is a strip copper mine in Mon'tana Province," he said. "They need an acolyte to learn the rituals from the resident."

"An acolyte? But, uncle, I . . ."

"Don't think it'll lead to priesthood," said ó Plar. "You'll be digging, too. You appear to like digging."

"But . . ."

"Miners tend to be a profane lot," said ó Plar. "It comes from all that digging, no doubt."

Saim said: "Uncle, I don't care what you do to me, but won't you at least examine . . ."

"Enough!" ó Plar twisted an almost imperceptible ring on his staff. "Do you hear and obey?"

Saim stiffened to attention, feeling a terrible outrage that ó



Plar should think it necessary to use the power of the staff in this. Saim's lips moved almost of their own volition: "I hear and obey."

"You will pack a minimal bag and leave at once for the Blessed of Heaven mine at Crystal, Mont'ana Province," said ó Plar. "Orders will be waiting for you at the train terminal." Again, he twisted the ring on his staff.

Saim stood rigidly at attention. The signal of the staff filled his mind with a procession of terrors without names. There was the red unthing of the black place shaping his thoughts into forms he no longer recognized. There was the slimy green part-self hearing and obeying. There was . . .

"Go!" ordered ó Plar.

The signal relaxed its hold.

ó Plar bowed his head, mumbled the litany of peace. His head was still bowed when he heard the door close. The tinkling of the water rhythm garden sounded overloud in the room.

*THAT was close, thought ó Plar. It's getting more difficult every day for me to deal with the accidental. My conditioning is so strong . . . so sure . . . so absolute*

Presently, he touched a button on his desk. The semi-opaque face and shoulders of a woman appeared in a moment, projected above the desk. She wore the blue

robe of a Priestess-Historian of the Brox Family. Her dark hair was tied in a severe braid across one shoulder. Green eyes stared at ó Plar from above a thin nose and stiff mouth.

"Will you give yourself up and submit to punishment?" asked ó Plar. It was a flat question, ritualistic.

"You know I cannot," she said. The answer carried the same lack of emphasis.

ó Plar held his face rigid to hide the momentary surge of loathing. *What this woman did might have an accidental necessity, but still . . .*

"Well, why have you called me?" asked the woman.

ó Plar rapped his staff against the floor. "ó Katje! You must observe the forms!"

"Sorry," she said. "I presume your nephew has just left you."

"I sent him to a mine," said ó Plar. "I give him a jolt of the staff he'll never forget."

"You gave him just enough to make him angry," said ó Katje, "not enough to bind him. He'll run away. Your staff isn't functioning correctly today."

ó Plar started to rise from his chair.

"You couldn't catch him," said ó Katje. "There's nothing you can do. But no blame rests on you. It was an accident."

ó Plar relaxed. "Yes. An accident." He stared at the woman.

*How to phrase this?* he wondered. *I must say a thing, yet not say it.*

"You're not trying to trace my transmission signal again, are you?" asked ó Katje.

"You know we've given up on that," said ó Plar. "No. I wish to say something of the simulacrum. This accident may give you Saim and Ren and Jeni, but I will have the simulacrum. He's unconditioned!"

"I need good workers," she said.

"They're hiding near the city," said ó Plar. "Saim came in on foot. They've found one of the ancient caves, that's what. The Elders hid them with devilish cunning, but sometimes an accident . . ." He broke off, staring at the woman. *Did she get the message?*

"How can you be sure you'll get the simulacrum?" asked ó Katje.

*Damn that woman!* thought ó Plar. *Directly into the jaws of the inhibition!* He said: "If you will not give yourself up and submit to punishment, there is no further need for us to talk. May you find a path to grace."

He broke the connection, watched the image fade. *Fool woman. Flying directly . . .* His thoughts dove off at a tangent. *No! Not a fool! She was testing my inhibition! When I reacted . . . that's when she knew for*

*sure we were prepared to follow Saim; we saw the accident.*

Now, ó Plar sat back, worrying, wondering. The little signal generator he had stuck to the back of Saim's robe during the embrace of greeting—it was sure to lead the acolyte guards directly to the hidden cave. Part of him exulted at this thought, but part recoiled in horror. The careful accumulation of so many accidents . . .

**G**EORGE saw the door and stopped. The door had been forced and repaired. It was a perimeter door, leading to a defensive chamber. He knew that. But the ideas of perimeter and defensive chamber weren't quite clear in his mind. They came in Ancienglis, a language with big gaps in it.

Abruptly, everything around him seemed strange, as though his surroundings had stepped out of phase with his reality. Something dragged at his ankles. He looked down at the long white robe he was wearing. It was like a . . . a hospital gown, but longer.

"Is something wrong, Jorj?"

He whirled, saw a dark man with flat features, almond eyes. *Almond eyes! Something wrong . . . dangerous . . . about almond eyes.* He said: "You're . . .

"I am Ren, your doctor." And Ren tensed, wondering if there'd

be some new violence from this simulacrum creature.

"Oh." George relaxed. "I've been sick."

"But you are well now." Ren maintained his alert, watchful attitude. *No telling what set this creature off.*

George took a deep breath.

*The door!*

He studied it. There were stains around it. *Blood?* He could hear voices behind it. He opened the door. It swung inward on silent hinges, revealing a chamber hewn out of gray rock. Indirect lighting gave the place a shadowless look of sterility. A man and woman stood in the chamber, talking. He knew the woman. Jeni. She came with food and sympathy in her eyes. But he didn't know the man—grey eyes, short-cropped blond hair. A feeling of youngness about him.

The man was speaking: "They didn't stand a chance of catching me. I outran them easily. And when we got into the timber . . ." He broke off, sensing the watchers.

Ren pushed past and into the room, said: "Saim, when did you get back?"

"I just this minute arrived." Saim spoke to Ren, but kept his attention on Ren's companion, who advanced into the chamber, peering around. Saim found the sight of the simulacrum freed of the regenerative tank shocking

and repulsive. He said: "Is something wrong with it?"

"With Jorj? Nothing at all. He's had a hard day's problem solving and probing is all."

"My name is George," George muttered. The words were flat as though he spoke to himself.

"He speaks!" said Saim. It was a terrifying idea, as though this creature had reached a tentacle out into a new and more deeply profane dimension.

Jeni said: "He looks tired, Ren."

GEORGE focused on Saim. "You're . . ." His voice trailed off. His features grew slack. He stood silent, staring into nothing.

"Is he all right?" asked Jeni.

"Oh, yes." Ren put a hand on George's arm. "His name's something like Maid-Jor or Jorj. We found the sonal pattern by tracing a course of least lip resistance."

"Major," whispered George.

"See?" said Ren. He knew he sounded prideful, but who else had ever revived a pile of bones—created life where death had lain for a thousand years? He turned back to Saim. "You spoke of running. Is something wrong?"

"My uncle ordered me to a mine. I ran away." Saim tore his attention away from the simulacrum, wondering: *How could*

*such a repulsive creature have so much attraction?*

"And you came directly here?" asked Ren.

"I put the grease on my shoes and around the bottom of my robe. The basenjimeters won't track me."

Fear edged Ren's nerves. "You came by a circuitous path?"

"Certainly. And I dropped through the fissure to the break under the tunnel where we . . ."

"It's different," said George. The voices annoyed him. And this place . . .

"His speech," said Saim. "It's . . ."

"Ren's had him in the Educator," said Jeni. She spoke quickly, feeling the tensions building up here, wanting to ease them.

"You should hear him in Ancienglis," said Ren. "Say something in Ancienglis for us, Jorj."

George drew himself up. "My name is Major George . . ." His thoughts veered out into emptiness, a black, enclosing place.

"He's overtired," said Ren. "I had him in the Educator almost two hours followed by a long stimulous search session. We're opening up broad areas, but there's been no really big breakthrough yet." He pulled gently at George's arm. "Come along, Jorj."

George's lips moved silently, then: "George. George. George."

They went out through the door, leaving it open. Ren's voice came back to them: "That's right, Jorj, in here." Then: "Saim, I'll see you in the lab in a few minutes."

They heard a door shut.

"Where does Ren get off giving me orders?" asked Saim. He felt stirrings of . . . could it be anger?

"Saim!" said Jeni. And she thought: *Here he is starting to act jealous again.* "Ren was just in a hurry."

"Well, there's no giving of orders here," said Saim.

She touched his arm. "I missed you, Saim."

IT was enough. The tensions melted from him. "I'm sorry it took so long," said Saim. "My uncle was gone when I got there. At a Council meeting up north somewhere. I sat around cooling my heels for eight days before he got back. I didn't dare try communicating. And I only had enough of that scent suppressor for one application; so I couldn't come back without abandoning our plan."

"From what you said, you might just as well have abandoned it," said Jeni. "Wasn't there anything you could do to make your uncle believe?"

"It wasn't a matter of his believing," said Saim. "Jeni, I had the funniest feeling that he be-

lieved me all right, but couldn't do anything about it. As though something within him forced . . ." Saim shook his head. "I don't know. It was odd."

"It's all politics," said Jeni. She felt . . . resentment. Yes. Resentment. One didn't feel anger, of course. But resentment was permitted. Like a safety valve. "He knows that display will destroy all popular support for our program. This is just politics."

"But when I told him the display would set off a wave of fear to ignite these weapons, he didn't react properly," said Saim. "It was almost as though he hadn't heard me. Or refused to hear me. Or . . . I don't know."

Jeni put down a shudder of fear, thought: *Ren should have gone, Or I. It was a mistake sending Saim. He's different . . . not like the Saim we knew . . . before.*

"We'd better get along to the lab," said Saim.

"There must be something we can do," said Jeni. She felt desperate, trapped.

"You should have heard him," said Saim. His voice took on some of ó Plar's querulous tone. "Don't you realize what it'd mean to revive all the old sciences, you young whelp? Don't you realize the violence and noise of just the Bessemer process?"

"Bessemer process?"

"A way of making steel," said Saim. "I reminded him that I was a metallurgist. That's when he first suggested I should get closer to my work. I knew then he was determined to send me to a mine."

"Saim! Jeni!—Come along!" It was Ren calling from the lab.

"Who's he think he's giving orders to?" asked Saim.

"Oh, stop that," said Jeni. She stood on tiptoes, kissed his cheek. "It's just that he's anxious to get on with our work." She took his hand. "Come along."

THEY went out into the hall. Jeni closed the door behind them, barred it. They turned left down the hall, through an open door into a square room with yellow, sound-absorbent walls. One section of a wall was cluttered with recording controls and playback systems. Jeni sat down in front of a master control panel, flipped a warmup switch.

Saim looked around. This room disturbed him for a reason he couldn't quite name.

Ren stood almost in the center of the room, beside a table strewn with notes and instruments. The Doctor rocked back and forth on the balls of his feet, studying Saim's face. *Incredible*, thought Ren. *Saim—as natural as ever. How powerful the conditioning of the Priest-Historians.*

*They take the mind and the being, and they shape all to suit their needs. And we would never have suspected had it not been for the accident and the tank we stole.*

Jeni said: "Saim, tell Ren what happened."

Saim nodded, reviewed what he had told Jeni.

"You ran away from the acolyte guards," said Ren. He nodded. "Wasn't that very close to violence?"

"I told you once I was an atavist!" said Saim.

"I've never doubted it," said Ren. "Do you think you could actually strike someone, hurt him?"

Saim paled.

"Don't be obscene!" said Jeni.

*Let them learn now what it really is that we're doing,* thought Ren. "I'm being practical," he said. He pulled back a sleeve of his robe, exposed a purple bruise on his forearm. "This morning, the simulacrum struck me."

"Ren!" It was a double gasp.

"Think about what is required to commit such a violence," said Ren.

"Stop it!" wailed Jeni. She hid her face in her hands. *What have we done?* she asked herself. *It started with Saim . . . because I love him . . . and couldn't stand to lose him. But now . . .*

"You see how it affects us?"

asked Ren. "I was never so frightened in my life." He swallowed. "I was two people. One of me was in such a panic that the little detector instrument fairly buzzed. And part of . . ."

"It detected your fear?" asked Saim.

"Exactly!"

"But couldn't that set off the weapon?"

Jeni lowered her hands from her face. "Not the fear from just one person," she said. "It takes the fear from a multitude."

"Pay attention to what I'm saying," said Ren. "I'm telling you something about this panic. It wasn't at all what you feel from a jolt of the priest's staff. Part of me was frightened, and part of me was watching. I *saw* the fright. It was most curious."

"You *saw* your fright?" asked Saim.

Jeni turned away. It hurt her to look at Saim like this. He was her Saim of old, but somehow . . . so different. So intense.

"Yes," said Ren. "At the very moment of my panic, I could consider what it meant. Violence has been all but stamped out of us. And what little's left, the inhibitory conditioning of our childhood takes care of that. But there must be something remaining because I found myself thinking that if Jorj struck me again, I'd have to grapple with him, stop him."

"Do you think you actually could have done it?" asked Saim.

"I don't know. But I thought of it."

WHY did he strike you?" asked Jeni. And she thought: *Perhaps there's a clue here to Saim's difference.*

"Now, there's another curious thing," said Ren. "Merely because I was in his path. I was questioning him about the weapons in this cave complex, trying different word-thought patterns in Ancienglis. Suddenly, he jumped up, shouted in Ancienenglis: '*Out of my way!*' And he struck me aside. He ran halfway across the medical lab, stopped, turned around, and did the same thing you saw him do out there. He just . . . seemed to turn off."

"Is it possible he remembers?" whispered Jeni.

"Of course not!" Ren felt his skin tingle at the stupidity of such a question. "You know how he was constructed."

Saim said: "But, what's the difference if . . ."

"We started with a skeleton," said Ren. "Dead bones. They gave us nothing but a cellular pattern. From that pattern the *kabak* tank got the pattern of adjoining cells. A one-cell thickness. Those new cells gave the pattern for the next layer, and so on. Jorj is *like* the original,

but he is not the original. The concept of memory, therefore, is not consistent."

"But those bones had been preserved by the gas from a weapon chamber," said Jeni. "There might even have been some flesh . . ." She shuddered, remembering Saim after the blast at the doorway to the cave.

"Even that wouldn't make any difference," said Ren. "This wasn't the same as growing a new arm, say, for someone injured in an accident. It wasn't even the same as . . ." He glanced at Saim, back to Jeni. "With an accident victim we have the original central nervous structure all intact. Or enough of it to give us solid patterns of the original. But with bones . . ." He shrugged.

All this talk of regeneration disturbed Saim, and he couldn't understand why. He said: "But this simulacrum was one of the Elders. Isn't it . . ."

"That's right," said Ren. "Was. The original died of the twenty-minute virus. There's no doubt he was a plague victim. He was one of the Elders. But the accent is on past tense of a thousand years ago. *Was.*"

Saim glanced at Jeni, back to Ren. "But he speaks the old language exactly like the tapes we . . ."

"Certainly he does!" Ren threw up his hands at the stu-

pidity of these questions. "But we have no reconstructed memories! All we have is the pattern, the inclination, the avenues where familiar thoughts once were. It's like . . ." He waved a hand in the air. "It's like a watercourse. Rain falls. It strikes the earth and runs into little random rivulets. These rivulets hit the paths of earlier rainfalls, and still earlier rainfalls, until all those original raindrops are channelled in old, deep watercourses. Don't you see?"

SAIM nodded. He suddenly saw more than this. *There could be dams on those watercourses. Permanent changes in the channels. Odd storage systems ready to gush out with strange twists of . . .* He began to tremble, abruptly pulled himself out of these thoughts.

"Habits," said Ren. "Old thoughts that are often repeated. They do something of the same thing. If we strike the right thought patterns, they'll slip into familiar channels for Jorj. He'll repeat the thought or action pattern. He'll do something that was familiar because of the old pattern."

"Like striking you," said Jeni.

"Yes!" Ren beamed at her. "They were violent people. And somewhere in this violent person we've regenerated, there's a clue to the weapons in this cave sys-

tem. Through those weapons we can open up all the old sciences. Think of the metals they had that we no longer have except when we melt down something of the ancients'. And the fuels!" Ren threw up his hands. He smiled at them, turned to the table, began pawing through the notes.

"It's like grasping hold of some terrible thing and not being able to let go," said Saim.

"What is?" asked Jeni.

Saim stared at her, ignoring the question, suddenly struck with the feeling that he once had known another Jeni . . . different . . .

"Why are you staring at me like that?" asked Jeni. The look on Saim's face frightened her:

"Here it is," said Ren. He straightened with a sheaf of notes. "The abstract on my sessions with Jorj. Our opening wedge is going to come from this simulacrum. I'm thinking that . . ." He broke off, focusing on his companions. "What's wrong?"

"It's almost as though I should remember something," said Saim.

"Ren, I'm frightened," said Jeni.

Ren moved to Saim's side, put a hand on his arm. "Do you feel ill, Saim?"

"Ill?" Saim thought about it. "No. I feel . . . well, different."



He stared down at his right hand. "Didn't I have a scar on this hand once?"

"A scar?" Ren glanced at the hand. "Oh." Ren's voice took on a forced heartiness. "So that's it. We all have these feelings at one time or another, Saim. They pass quickly."

"Feelings about scars?"

"If not scars, some other kind of familiarity," said Ren. "It's called *deja vu*, this feeling. You'll get over it."

"When I was testing that flying machine in the big cavern, studying the manual, and adjusting all the parts, sometimes my hands seemed to know what to do when I didn't," said Saim. "Is that what you mean?"

"It may even have something to do with racial memory," said Ren. "Just put it out of your mind."

**WOULD** you like to rest or have something to eat?" asked Jeni.

"No . . . I . . . Get on with it, Ren. Work first, rest later."

"As you say," said Ren. And he thought: *Trust Jeni to get him back on the track. I'll have to take that into consideration—the power of love and affection in maintaining a sense of normalcy.*

"Well," said Ren. He cleared his throat. "To get back to Jorj. To understand the original of

this simulacrum . . ." He leafed through his notes. "Yes . . . to understand the original, we must understand the psychology of the world that bore him. There were two opposing Alliances of power in that world. They'd agreed to disarm, but for years they disarmed with one hand while arming with the other. The natural result was a sense of shame. This cavern complex is a perfect symptom of that shame. Look how they hid it. More than a hundred meters of dirt over us that has to be lifted off by explosive charges before the actual weapons tubes are exposed."

"Are we sure it was shame?" asked Saim.

"Of course it was. Concealment is the companion of shame." Ren shook his head, marvelling at the way the non-specialist could misinterpret. "And beyond this even," he said, "beyond this cave complex and the others it hints at, think of what the opposing Alliance had. Another entire network of these weapons."

"We've discussed all this before," said Saim. He was beginning to feel impatient.

"But not the psychology of it," said Ren.

"I'd rather talk about something more to the point," said Saim. "First, what about the targets? These weapons were

aimed someplace. Those targets must have changed in a thousand years."

"It wouldn't make any difference," said Jeni. "I found something horrible in dismantling some of the little guiding instruments."

"Jeni!" said Saim. "You might have exploded one of those monsters!"

"No," she said. "I didn't touch an actual weapon. I found a store of spare guidance systems. Some of them will follow lines of magnetic flux. Some can be set to go to a large area of heat or a small area of intense heat or a near bulk of metal. And you must keep in mind that all these systems are interlocking. They're made to go into a single package."

"Tell him about the other one," said Ren.

"It's a tiny version of the fear sensor," said Jeni. "When it nears a large city, it assumes command of the total guidance system. It's attracted by massive waves of fear. The fear of a populace exposed to the weapon attracts the weapon."

THERE has to be some way to stop that Millennial Display," said Saim. "The wave of fear . . ." He walked away from them, turned. "People will see fireworks, all right. And that's the last thing they'll ever see."

"Maybe we should go to ó Katje and combine forces," said Jeni. "Maybe she'd help us convince . . ."

"ó Katje!" barked Saim. "I don't trust her!"

"Now, Saim," said Ren. "She's a renegade, a rebel just like ourselves. She's even transmitted pictures and data about the weapon they're studying."

"Saim, the size of that weapon!" said Jeni. "It's fifty times larger than these ones we found!"

"I don't see how she could be a rebel," said Saim. "You don't understand about the Ultimate Conditioning. I do. I've seen my uncle come out of the *kabak* room after his yearly renewal. Sometimes he looks like a man near death. We have to nurse him. You don't understand."

"Accidents do happen," said Ren. He spoke quickly, impatient to get back to his notes and the work as he saw it.

"ó Katje's done nothing except try to force us to reveal our hiding place," said Saim. "That alone is enough to make me distrust her."

A buzzer sounded on the panel behind Jeni. She whirled knocked down a toggle switch.

"Was that the outside warning system?" asked Saim.

"Someone's approaching the old cave entrance," said Ren. He glanced at Saim. "Are you

sure you used that odor suppressor?"

"I smeared it all over," said Saim. He lifted the hem of his robe. "You can see the stains. Besides, I came in the fault fissure, not the . . ."

ANOTHER buzzer sounded overhead. Jeni slapped another switch.

"Coming directly toward the entrance," said Ren. "Saim, did you say anything to your uncle that . . ."

"Why don't you come right out and ask if I've betrayed you?" demanded Saim. He felt stirrings of unrest. *Anger?* Again, he tried to remember the emotions of childhood, and failed. The conditioning was absolute here.

"What's this?" asked Jeni. She stood up, tugged at the back of Saim's robe, removed a small disc of metal stuck there with adhesive. She extended it on her palm. "Why would you wear this decoration on the back of your robe?"

Saim shook his head, confused, feeling himself on the verge of a fearful revelation. "I . . . it isn't . . ."

"Did your uncle embrace you in greeting?" demanded Jeni. She stared at the disc on her palm.

"Of course. Family always . . ."

"That's it!" she enclosed the disc in a fist, jumped past him, ran to the door, hurled the object into the hall. Turning, she slammed and bolted the door. "Signal generator," she said. "Has to be."

"Your uncle was more clever than you thought," said Ren. And he thought: *We should never have sent Saim. Jeni or I would never have made such a mistake.*

Jeni returned to Saim, inspected his robe. "Turn around."

He obeyed, moving with shocked stiffness.

"Nothing else," she said.

A red light flashed on the panel beside them.

"They're forcing the perimeter door," said Ren.

The idea of forcing such a door seized Saim with a sudden panic. He said: "They . . ."

"It means they're using metal detectors," said Ren. "A signal generator would only give them the general area."

"How did ó Plar know Saim would try to escape?" asked Jeni. "It doesn't . . ."

"He could've planted the idea," said Ren. "We're wasting time. We'll have to run for it." He strode to the door, flung it open. *This happened because I'm surrounded by fools!* he thought.

"But what about the simulacrum?" protested Jeni. "Can he travel?"

Ren turned in the doorway. "In the flying machine. Do you still believe you can operate it, Saim?"

"Well, I've only lifted it a little bit off the floor," said Saim. "But . . . yes, I . . ."

"I'm as frightened at the thought as you are," said Ren. "But there's no other way. Come on." He turned, strode into the hall.

Saim and Jeni followed.

THEY could hear the hammering now, metal against metal. *They shouldn't try to force that door,* thought Saim. *That's dangerous.*

"Hurry it up!" called Ren.

*Everything's happening so fast,* thought Saim. He felt resentment at pressures he couldn't understand.

Jeni took his hand, urged him faster.

Their way led off the big hall, down a narrow passage single file. They barred doors behind them. Dim white exciter lights blinked on at their passage, surrounding them with a pale nimbus of illumination. The air grew cooler. They came out into a laboratory cut deep in the rock. A green light glowed above a cot where the simulacrum slept. He was a green shape within green within green . . .

Saim turned away. This was the room where Ren kept the

stolen regeneration tank. Something about the place loomed in Saim's mind, a black image of terror.

*Why?* he wondered. *Why? Why?*

"I gave him a sedative," said Ren. "We'll have to wheel the cot." He pointed to the far wall. "There's a can of inflammable fluid over there, Saim. Some of the fuel from the flying machine. Get it, please."

"What do you want with it?"

Saim's question touched a core of impatience in Ren. "The regenerative tank's in this lab. You know that!"

"But why . . ."

"We can't let them find what we've done," said Ren. "There's too much evidence around. We have to destroy it."

"What about your notes in the other lab?" asked Jeni.

"I have them in my pocket. The rest of the stuff up there won't mean anything without the evidence in here. Now, hurry it up."

*Yes!* thought Saim. *Destroy this place!* He said: "Where's this fluid you . . ."

A dull roar shook the room. The ceiling trembled, showering them with dust.

Ren said: "What was . . ."

"The main door," said Jeni. "We should've known. The Elders must've built one of their diabolical devices into the door

just as they did in the . . ." She broke off, staring at Saim.

"What is it? What's wrong?"

THEY whirled. It was George, speaking in Ancienglis. He stood beside his cot, staring up at the ceiling. "Are they attacking?"

Ren answered in the same tongue, wary that this might return the simulacrum to violence. "We have to escape, Jorj. We've been discovered." Aside to Jeni and Saim, he said: "Watch him carefully. Shock awakened him from the sedative. I'm not too certain of his metabolism yet. He could do anything."

"There won't be anyone alive up there at that door," said Saim. "Whoever was . . ."

"Now it's certain we have to run," said Ren. "The explosion will attract others, and the cave's wide open."

"Where are the guards?" demanded George.

"Dead," said Ren. He darted across the lab, returned with a yellow can that sloshed in his hands.

"What're you doing?" asked George. He rubbed at his head.

"Burning my records," said Ren. "Please stand aside."

"Bad as that, eh," said George. He still spoke in Ancienglis. "The dirty, sneaking bastards!" Abruptly, he shook his fist at the ceiling. "We'll show you!"

A pungent odor filled the room as Ren poured and sloshed the contents of the can around.

"Use plenty of gas," said George. "Don't leave anything for 'em."

They retreated out the door. Ren threw the can into the center of the room.

Jeni clutched Saim's arm. "Saim, I'm frightened."

He patted her hand.

"Who's got a match?" asked George.

Ren took a firepill from his pocket, crushed it between his fingers, tossed it into the room. He slammed the door as a blossom of orange flame jumped up from the floor.

"To the big cavern," said Ren.

Saim turned, leading. Jeni stayed close to his side.

Ren stayed beside George. "You feel all right, Jorj?" he panted. He spoke Haribic, testing.

"Fine, fine." George answered in Ancienglis.

"He's in kind of a shock," said Ren. "We must be careful."

"Where're we going?" asked George. He felt turmoil at the edges of consciousness, but the action and need for it were central, demanding all attention. They'd been expecting the attack for a long time. Having it actually occur was almost a relief. *The dirty, sneaky bastards!* "Where're we going?" he repeated.



Ren searched in his mind for the Ancienenglis word. "Helicopter," he said.

"Hope they don't have much air cover," said George. "A 'cop-ter's a sitting duck for anything with firepower."

THEY emerged into an echoing chamber, large and cold. Dim exciter lights emitted a pale green glow around the room at their entrance. Still, the place remained a mass of phantom shadows.

"Well, blow the charge!" shouted George. He darted to the right along the wall, pulled down a fluorescent handle.

A crackling roar deafened them.

"Never trust a damn' shaped charge!" shouted George. "But they always seem to work. He threw another handle beside the first one.

Part of the ceiling creaked and groaned upward, exposing a length of evening sky pale dove grey against dark green treetops. Something clanked and the ceiling stopped its movement.

Jeni pressed her face against Saim's chest, clung to his robe. "What's happening?" she whispered. "The noise . . ."

"Damn' thing's stuck!" said George. He punched a red button beside the handle. A sharp, crackling explosion shook them. The ceiling hurtled away and

they heard it land in a thunderous crackle of broken trees and branches.

Jeni trembled. "What's . . ."

"It's all right," said Saim. "You knew what the old instructions said about opening this chamber. That's all it was. The explosion . . ."

"I couldn't have done it," she said.

Saim looked at Ren beside them. The Doctor's eyes were closed, his hands clenched into fists at his sides. His lips were moving in the litany of peace.

"For Chri'sakes, come on!" yelled George. He turned, ran toward a squat black machine crouched in the center of the chamber.

Ren was the first to follow, moved by concern for his patient. Saim took Jeni's hand, pulled her toward the helicopter.

"You've been in the flying machine before," he said. He found himself caught up by a growing sense of excitement at the thought of leaving the ground. There were remote feelings of fear, but so far away . . .

GEORGE opened the belly door, clambered into the helicopter. Ren followed. Saim pushed Jeni up onto the pipe step, clambered in behind her, slammed the door. Everything was suddenly caught up in George's urgency.

"Get a move on!" George yelled. He lifted himself up into the cockpit, slid into the left hand seat. *Damn' civilian types*, he thought. His hands moved swiftly with an automatic sureness over the controls. "Come on! Hurry it up!"

Saim lifted up into the cockpit.

George motioned him into the right hand seat.

Saim obeyed, watched George strapping himself in, lifted his own straps from beside the seat. There was still a smell of the preservative gas in the cockpit, disturbed by their movements.

Ren climbed up between them, stared at George. "Is *he* going to operate this machine?"

"Who'd know better how these machines work than one who actually flew in them?" asked Saim. "And I'll be right here."

"He could break down at any minute," said Ren. "You mustn't let . . ."

"Shut up!" ordered George. He pushed a white button on the panel in front of him. A grinding sound came from overhead, was replaced by a whistling roar.

Saim put a hand on Ren's shoulder, pushed him back into the cabin. "Go strap yourself down! See that Jeni's all right!"

"Here we go!" yelled George. "Look out for ground fire, and keep an eye peeled for their air cover."

The big machine jerked up-

ward, lurched, then rose smoothly out of the chamber. The walls slid past. Then trees. They lifted over treetops into a dove grey sky.

Saim felt panic begin, closed his eyes tightly. *This is natural*, he told himself. *The sky is not just the place of birds*. Exhultation seized him. He opened his eyes, looked out the windows.

It was already dark on the ground, but up here in the sky it was still light. This was like living in two worlds at once.

"We're flying," he whispered.

Jeni's voice lifted from the cabin: "Saim! We're in the sky!"

He heard the terror in her voice, called back: "It's all right, Jeni. I'm here."

"I'm frightened," she whimpered.

Ren's voice came from the cabin. "Don't look out the window, Jeni. Here, swallow this."

SAIM turned, watched what George did to command the machine. Yes. Just as the manual instructed. The knob there for adjusting fuel. The big handle for tipping and turning the machine. Saim let his hands rest on the wheel, felt the movements. And suddenly the whistling of the turbine, the muted thump-thump of the rotors seemed louder.

Ren's head lifted through the cockpit door. "You must head



north across the wilderness plateau, Jorj," he said. "That is the way to ó Katje's."

George lifted his hands off the wheel, looked around at the gathering darkness beneath them, at the people in the cockpit, at the robe he was wearing.

"Jorj?" said Saim. "Jorj?"

*The strangeness, thought George. It was a whirling sensation in his mind. The terrain's all different. Everything's different.*

Ren put a hand on Jorj's arm. "Jorj?"

The helicopter began to tilt left.

Saim gripped the wheel, righted them.

George said "It's all . . . I don't . . . where are we?" He rubbed his palms across his eyes.

"It's as I warned," said Ren. "Jorj has regressed. Help me unstrap him, Saim."

But Saim was too busy controlling their flight. He waved Ren's hand away from the fuel control knob. "No! Don't touch that!"

"How am I going to get him back where I can examine him?" Ren felt exasperation, knew that the drug he had taken and the medical emergency were suppressing panic. *They were in the sky!*

"Sit on the floor between us," ordered Saim. "Don't touch anything. Get Jeni to help you."

Jeni's head came through the door. "What's . . . Saim! You're running the machine!"

"You saw me do it in the cavern!"

"But that was different! You . . ."

"Here!" commanded Ren. "Stop that chatter and help me."

"Yes, of course." She was immediately all contrition.

SAIM concentrated on flying the machine, Ren and Jeni dragged the simulacrum from the adjoining seat. George was slackjawed and staring. Empty eyes. They frightened Saim as they swept out of his line of sight. He felt dampness beneath his palms.

There was full darkness in the sky now with the moon just lifting above the horizon. Saim saw village lights below to his left and far away to the right. Controlling this machine felt so . . . natural. His hands seemed to know what to do. He reached out, turned a switch. The panel glowed a dull green. Another switch. Yellow light came through the open door from the cabin.

"Thanks for the light," said Ren. He came through the door, slid into the seat George had occupied.

"What landmarks do we look for?" asked Saim.

"Where are we?" asked Ren.

He spoke with a drugged dullness.

"North of Council City. I can see some village lights, but I don't know what villages. The wilderness plateau's ahead."

"ó Katje said two peaks with a lake between them," said Ren. "And a burn scar like a cross on the northern peak."

"How far?"

"She said five days on foot from Council City, but near an overtrain route."

Saim glanced at his instruments. "We could be there in only a few hours."

"Saim," said Ren, "how do you keep your sanity? I know that when this tranquilizer wears off I'm going to be hysterical." His voice lifted slightly from its dullness. "We're in the sky!"

A masculine groan sounded from the cabin behind them. Jeni called, "He's awake, Ren."

Ren shook his head, swallowed. "Does he seem to be all right?"

"Yes. But he's awake."

"Just keep an eye on him. See that he remains quiet."

George stirred on the stretcher, feeling the bands across his chest and legs. *My name is George*, he thought. *I must remain quiet.*

SO you're George," said ó Katje. George leaned back in his chair, stared around the little

room where he had awakened. He liked the way this woman said his name. It sounded *right*, not like the mushed-out consonants the others used. He could even hear a faint echo of the first *e*.

"Is that your name?" she asked. "George?"

She spoke Haribic. George answered in the same tongue. "That's my name." The words came out a little stiffened. Haribic was difficult at times.

The woman shifted to Ancienlis, and again he had that feeling of rightness about the way she spoke. "Is there more to your name?"

"Yes. I'm Major George . . ." The words trailed off into emptiness.

She turned to Ren standing behind her. "Is he all right?"

"Oh, yes." Ren stepped forward. He felt a great diffidence in ó Katje's presence. It was much more than the usual conditioned reverence for Priest or Priestess. "He does this frequently, ó Katje," said Ren. "Whenever his thoughts have led him into a blank area of mind."

*What are we ever going to do with him?* wondered ó Katje. She studied the simulacrum. There was a roughness to his features that one seldom encountered in people.

"George," she said. "George?"

George looked at her, slowly focusing. Woman in a blue robe. Long black hair tied in a silver loop at the back. Odd crook-necked staff in her hand. Thin face dominated by green eyes.

*My name is George, he thought.*

*I could call ó Plar and dump the whole thing into his lap, she thought. But that would be tempting his ignorance of our hiding place. If he learns we have the simulacrum. No. The accident must be maintained.*

And she sensed that ó Plar could have no better solution for this Elder than she could find for herself. The creature looked so helpless in his rugged way. So attractive, really.

Ren said: "Perhaps you should question him, satisfy your mind about the fear detectors." And he thought: *How odd, this awe of her. Could she have her staff tuned to some strange new frequency?*

"What about these fear detectors?" she asked. "We found no such records or devices in this cave complex." . .

"But they exist, ó Katje."

"I still would like to have seen these devices and the records of them for myself. I think it odd that you should have burned everything."

"I didn't want it discovered that I'd restored . . ." He nodded toward George.

SHE looked at George, back to Ren, thinking: *How strange this Ren is. "Were you so ashamed of what you'd done?"*

Ren's shoulders stiffened. "I didn't think it wise to broadcast that I'd violated a *kabak* room."

"I see." She nodded, feeling a brief constriction of her conditioning. It passed quickly and she thought: *ó Plar was right about this Ren. An odd variant on the renegade pattern. A new kind of accident. "Perhaps there'll be similar devices and records here," she said. "We'll look for them."*

"And we must act quickly," said Ren. "The danger . . ."

"So you say."

"You don't believe me?"

"I didn't say that. But you must admit you have other reasons for wishing the Millennial Display cancelled."

"You sound as though you side with the Priests on this." And he wondered: *Could Saim be right not to trust her?*

"It's one thing to follow an accident that breaks with taboo," she said. "For the sake of knowledge, of course. It's quite another thing to try to destroy the very roots of . . ."

"Accident?" He stared at her.

She fingered the slim central ring on her staff, and Ren felt the ripple of nervous disquiet that always preceded a heavy taste of displeasure.

"Please," he petitioned her.

"I would hate to return you to a full course of conditioning," she said. And she thought: *We'll have to do it, of course. As soon as we've exhausted our need for his accidental talents.*

Ren paled. "ó Katje, I . . ."

"It doesn't please me to have to emphasize my words with the staff," she said.

"Of course, ó Katje." He found that he was trembling. There were dim recollections in his mind of a full course of reconditioning. Darkness. Fearful twistings of semi-consciousness. Terrors!

ó Katje looked down at George. "Now, Ren, tell me your purpose with this simulacrum."

"Yes, ó Katje." He stilled the trembling. "It seemed logical. The bones were intact and in a wonderful state of preservation because of the gas."

"Gas?"

"From a weapon chamber."

"Ah, the inert substance, the preservative."

"Yes. There'd been some sort of accident to the chamber. And there was only one set of bones. I knew from medical use of the simpler tanks that the *kabak* tank could reproduce a cellular pattern in its full stage of . . ."

"This is all very interesting, dear Ren, but it's confined to *methods* when I'm more interested in your purpose."

YES, of course." He found that his right eyelid was twitching, rubbed it. "Purpose. I felt that we could restore many of the old habit channels in such a being—the compulsives, certainly, and the overriding repetitives—and from them gain clues to the working of the ancient devices."

She spoke through a haze of inhibitory shock: "And you restored such channels?"

Ren missed the stiffness of her voice, said: "There are signs. I think we're on the verge of a breakthrough. If we once restore his full name, perhaps . . ."

"How could you?" She almost screeched the words.

He stared at her. "ó Katje, what's . . ."

"The pains of such recall," she said. "The recollection of his actual moment of death!"

"But ó Katje, it's not exactly memories we . . ."

"A quibble! Have you no inhibitions at all?"

"ó Katje, I don't . . ."

"That which the Lord has taken unto Himself completes the Circle of Karma," she said. "You've not only invaded this domain, you . . ."

"But you *knew* this, ó Katje!"

"There's a difference in knowing an abstract idea and seeing the very substance of it," she said.

"Simulacrum," said George.

They turned, looked at him.

"Simulacrum?" asked George. All this talk-talk between the beautiful dark woman and the doctor. It had dawned on George that simulacrum referred to himself. And in his Educator-memory was a definition: *Sham. Something vague and unreal.*

"I'm no simulacrum," he said. "I'm real."

ó Katje drew in a trembling breath. "And that, Ren, is the thing which overshadows all else. He is real. He is real. He is real. And you would have him recall all his past, all his name, all . . ."

"My name?" said George. "It's Major George . . ." His thoughts shot out into the emptiness. There was no mindhold here, no place of orientation. But he knew he had been here before. There were faces, words, names, sensations.

Somewhere distant and subdued he heard a woman's voice. "You see, Ren? Have you any idea how constricting the inhibitions of a Priestess can be? Have you even the faintest conception?"

But that was away somewhere. This place in his mind, this was *here*. And there were old, familiar-feeling things. So many faces. And insistent voices: "And don't forget to bring home a dozen eggs. We're having omelet . . . Daddy, can I have a new

dress for my birthday? . . . If you're the last man in the missile post and condition red is signaled, what is the procedure? . . . But I've got to know what's happened to my family! I've got to know!"

WITHIN his mind, George stared at that last speaker, recognizing the face. *It was himself!* He was like a puppet standing in front of a visiphone, shouting into it at the uniformed man on the other end. *Man? Sure—Colonel Larkin!* "Pull-yourself-together man!" the Colonel was yelling. "You're a soldier, you hear? You have your duty to do! Now, do it! Fire Betsy and Mabel! At once, you hear?" The Colonel paled, clutched at his throat. "May Day, you fool! People are dying like flies out here. The Ruskies have sneaked in a . . ." The Colonel supported himself on the phone stand. "Major Kinder, I order you to do your duty. Fire Betsy and . . ." He slumped out of sight.

George pushed himself out of the chair. He saw a tall woman, a figure in another world. She stepped aside.

*Fire Betsy and Mabel.*

The room seemed unfamiliar. Oh, sure. There was the door. These missile post doors were all the same. He'd forgotten for a moment that they'd escaped to

another post. In a 'copter. The first post had been under attack. That's what the Colonel was talking about, of course. *May Day. Fire Betsy and Mabel.*

George crossed to the door, opened it.

"What's he doing?" It was the female voice behind him. The sound barely registered.

"He's living out some ancient habit pattern." It was a man's voice. Ren. But Ren was part of an unreal world. This was now. This was urgent.

George heard footsteps padding behind as he emerged into a hall, turned left toward an open door where he could see part of an instrument panel with a sigalert screen. *Fire Betsy and Mabel.* There was an image in his mind—giant grey tubes with sleek delta fins. The big ones. The city-wreckers.

HE entered the room with the instrument panel, still dimly conscious of the footsteps following. And distant voices: "What's he doing in here? Shouldn't we stop him? Would it hurt him if we interfered?"

*Better not interfere,* thought George. He glanced around. There was a difference in the room, a difference in the controls on the panels. But it was difference that he recognized. This was a command post. One of the big centrals. The sequence panel

held remote control segments for radio and radar direction of any bird in the entire defense complex. There were overrides. Salvo controls. Barrage. The master console was the newer type with contour handles instead of the old knobbed ones. The anchored chair in Command-Central position held a power arm.

Two people stepped aside as he crossed to the chair, slid into it. Names flitted through his mind: *Jeni. Saim.* He coded the board for recognition to bypass the booby-traps, tested for power. A light glowed in front of him.

"He's turned on a power source." That was Jeni.

"But nothing happened! Nothing exploded!" That was ó Katje.

"He did something first," said Jeni.

"Do these things still have power?" That was Ren.

"Dry capacitors, sun-charged," said Jeni. "Virtually ageless in their preservative."

"Be quiet!" snapped George. He activated the dry-run circuit tester. The board went green except for two plates in the lower left. One indicated firing chamber evacuated of gas. The other showed activity in the firing chamber. George rapped the plates. They remained dead. There couldn't be anything wrong with the birds, he knew. The rest of the board was green.

"I think we'd better stop him,"

said ó Katje. She felt a moiling war of inhibitions within. Nerves cried for action, were stopped. To interfere with this real-simulacrum might injure him-it. But there was a deadly directness in George's actions that told her what he was doing. He was getting ready to explode those terrible weapon tubes!

"Is he getting ready to set off one of those weapons?" asked Jeni.

"They used collapsed atom energy," said Ren. "It doesn't seem likely he'd . . ."

"I told you to be quiet!" said George. He indicated the dead plates on the board. "Can't those fools get out of there!" He punched the twenty-second warning, felt the dull clamor of it through his feet.

"What's that?" asked Saim.

"Can't those fools hear the warning?" asked George. "Do they want to be burned to cinders?"

ó Katje tottered forward, fighting her inhibitions. She put a hand on George's arm, pulling it as he started to move it toward a red handle on the panel. "Please, George, you must not do . . ."

HE struck without warning. One instant he was sitting in the chair, intent on the panel. The next instant he was out of the chair, punching.

ó Katje fell beside the chair. Ren was knocked against a side wall, sagged to the floor. Jeni moved to interfere, and a fist to the side of her head sent her reeling.

Through blurred vision, Jeni saw Saim retrieve ó Katje's staff from the floor, raise it. Jeni staggered sideways, only half conscious, but still able to see Saim bring the staff crashing down on George's head. The look in his eyes as he delivered the blow was almost as terrifying to Jeni as was awareness of the violence itself.

Jeni slumped to the floor, pressing her hands to her eyes.

A shuddery silence settled over the room, then Saim was at her side, cradling her head: "Jeni! My dear, did he hurt you?"

His touch was both repellant and seductive. She started to push him away, felt her palm against his neck. The next instant, they were kissing with a passion that blocked out virtually all other sensation.

*So violent!* she thought. *So wonderfully violent!*

Saim pulled back, caressed her cheek.

"Saim," she whispered. Then, as memory of violence flooded back into her mind. "You hit him!"

"I saw him hurt you," said Saim. "I don't know. I couldn't let him hurt you."

Ó PLAR stared down the length of the narrow work table at ó Katje. Yellow light from a ceiling fixture bathed the center of the table, reflected up into the faces of Ren, Jeni and Saim. ó Katje held a cold compress against her jaw. Purple bruises marked Ren's jaw and Jeni's cheek. Only Saim appeared unmarked, except for a cold, staring look about the eyes.

A feeling of sadness and futility filled ó Plar. How long would it be until another accidental set of circumstances combined in a chain such as this one? A Priestess who could dig and explore antiquities without inhibition—would there ever again be another such as ó Katje? And Ren, who had stolen a *kabak* tank, and revived a virtually uninhibited ancient—how could they ever hope to happen on such a sequence ever again?

ó Plar sighed, spoke with deceptive mildness: "ó Katje, you knew it would tempt my ignorance of your hideaway to bring the simulacrum here. Could you not have been satisfied with Ren and Jeni and Saim?"

"I didn't bring the creature here." The movement of her mouth sent pains from her jaw up the side of her head. She grimaced.

"The path of the air machine was marked," said ó Plar. "We couldn't fail to note the direction,

and then it was simply a matter of localization. You must've known this."

"I tell you I didn't bring them here," said ó Katje. Again, she winced at the pain. She shared some of ó Plar's feeling of futility, but it was tempered by something she could only call negative-emotion. It couldn't be resentment, certainly. But if ó Plar had only waited! The situation had been filled with such accident potential!

"So it was all some kind of trickery," said Saim.

ó Plar tapped his staff against the table for emphasis, said: "You will not discuss what you fail to understand." He kept his attention on ó Katje. "Look at what has happened, ó Katje. The violence. The defilement. Is it any wonder that I . . ."

"You could have waited," she said. And she realized that it *was* resentment she felt. The violence was to blame, of course. It upset every inhibitory balance.

SAIM slammed his palm against the tabletop, watched the shocked reactions. He could feel something building up within himself. It had something to do with the violence and the dark memories.

"You haven't said anything about my striking the simulacrum," he said.

Again ó Plar tapped his staff



against the table. "Saim, must I silence you?"

*I could grab the staff away from him, break it before he realized what was happening, thought Saim. And he sank back in his seat, shocked to stillness by the thought. What is happening to me? he wondered.*

"So," said ó Plar. "Ren, bring your simulacrum from the other room, please."

Ren stood up obediently, left the room. All he could think was: *The shame! The shame! Oh, the shame!*

Jeni reached across the space between their chairs, took Saim's hand. *I started this, she thought. She looked sidelong at Saim. Because I refused to lose him. That's when it started. If Ren hadn't already smuggled a rejuvenation tank into the cave, he'd never have thought about building life into Jorj's bones.*

"In a way, we should be glad it's over," said ó Plar. "I'm beginning to see that violence serves no reasonable purpose."

"That's your inhibitions speaking," said ó Katje. "Any-way violence doesn't have to be reasonable." And she thought: *There's a thing we've learned today—the attraction of being unreasonable.*

Ren came back leading George.

"Seat him here by me," said ó Plar. He gestured to an empty chair at his right.

*I am called George, George thought. Major George Kinder, USAF. USAF? That meant something important, but he couldn't fix it to any association. Uniform? More nonsense. He realized someone was leading him into a room with people. The back of his head throbbed. Pain. And the yellow light hurt his eyes. He sank gratefully into a chair.*

"You all have forced a most painful lesson upon yourselves," said ó Plar. "I wish no one to leave this room. You will watch while I do a terrible thing that must be done."

Ren stood behind George's chair. "What are you going to do?" He felt suddenly fearful, cowed by a sense of enormous guilt.

"I am going to awaken the ancient memories," said ó Plar.

Ren stared wildly around the table. "Memories? You mustn't!"

"Part of a man cannot be re-conditioned," said ó Plar. "Would you have me destroy him?"

ó Plar felt the weariness in his bones, sighed. So much that could have happened here, and now no alternative but to level it all down to the great common inhibition. No help for it at all. The strictures of his own conditioning were too severe to hope for any other solution.

"But it's just a simulacrum," protested Ren. The terror welling

in his mind threatened to overwhelm him.

"You will sit down here on my left where you may watch your simulacrum's face," said ó Plar. He gestured with the staff, kept it aimed at Ren while the doctor obeyed. "Now," said ó Plar, "this is a human being. We will start with that. Ren doesn't want to talk about memories because if he did he'd have to consider this creature more than simulacrum."

"Please?" said Ren.

"I will not warn you again," said ó Plar.

GEORGE leaned forward, ignoring the pain in his head. He could feel deep anger against these people, dark and obscure currents surging within himself. "What are you talking about?" he demanded.

ó Plar said: "George, who are we, we people seated around this table?"

George felt rage mingled with frustration. A word came into his mind. "You're Russians!"

ó Plar shook his head. "There are no Russians anymore. Or members of any other citizen state." He gestured at his robe, his staff. "Look at me."

George looked—the robe. He glanced around the table, back to ó Plar. Fear kept him silent. The strangeness . . .

"Do we look like anyone you've ever seen?"

George shook his head. *I'm having a nightmare*, he thought.

"No," he said.

ó Plar said: "It's been a thousand years since you died, George."

George sat silently staring, unable to face the word or escape it.

A shocked gasp echoed around the table.

"ó Plar?" whispered ó Katje.

"Face it together, all of you," said ó Plar.

"Died?" whispered George.

"You died," said ó Plar. "The pattern is within your mind. The circle complete. I will recall it for you from the account of Pollima, the great historian."

"ó Plar," said Saim. "Uncle, don't you think you should . . ."

"There's no more accurate account," said ó Plar. "A wonderfully terrible account from an eye witness. Child at the time, of course."

Saim felt the stirrings of vague memories. "But, Uncle . . ."

"What do you mean DIED?" roared George.

"Listen," said ó Plar. "You felt dizzy, then extremely hot. Your vision blurred. You found it difficult to breathe. You most likely clutched at your throat. You heard your own heart beating. It was like a giant drum in your head. Then you fell unconscious. Then you died. The whole proc-

ess took about twenty minutes. That's why we refer to it historically as the twenty-minute virus."

*I was in the hallway from communications to the control chamber, George thought. I saw Vince's body sprawled halfway out the door to the ready room. His face was mottled black with the veins all dark. It was the most terrifying thing I'd ever seen. But the Colonel had just told me to fire Betsy and Mabel. I stepped around Vince's body and headed for the panel. That's when I suddenly felt dizzy.*

I FELT dizzy," he said.

"That's correct," said ó Plar. And he glanced at the frozen shocked faces around the table. *Let them see what they have revived*, he thought. He turned back to the figure of George. "If there was anyone near to hear you, you probably said you were dizzy. Pollima's father was a doctor. That's what he said. He described his symptoms to her as he died. A truly heroic action."

"Hot," said George. "Sweat's pouring off me."

"And what do you see?" asked ó Plar.

"Everything's going blurred," he said. "Like it was under water." The tendons stood out on his neck. His chest strained upward, collapsed . . . strained upward, collapsed. "Can't . . . breathe My chest. Pain. My god! What's

that pounding . . . that pounding . . ."

A hand came past ó Plar as Ren slapped a hypoject onto George's neck.

"Thank you, Ren," said ó Plar. "I was about to request that." He stared at George's face, the jaw sagging in unconsciousness. "I imagine that's burned all the old memory channels back into place. One's life pattern tends to be linked to this trauma."

*How right he is*, thought Saim.

"You . . . monster," whispered Ren.

ó Plar glanced at the doctor. "Me? You malign me. I did a necessary thing, and I'll pay for it much more heavily than you'll pay for what you did. *You* don't have to re-experience Ultimate Conditioning once a year."

ó Katje dropped the compress from her jaw. "ó Plar! I did not think . . . ohhhh . . ."

"Yes, a terrible thing to take into the *kabak* room," said ó Plar. "I most likely won't survive it."

Saim got to his feet. All during ó Plar's recital he had felt darkness peeling away from his mind like onion skins. He felt terrified and exalted. Kabak room without end down a corridor of time. Each constricting the will, subjecting the individual life to a dull pattern of placidity.

"I died," whispered George.

"Only once," said Saim. "I've

died times without number." He glanced at ó Plar. "In the *kabak* room, eh, *Uncle*?"

"Saim!" ó Plar raised his staff.

In one stride, Saim was beside ó Plar, wrenched the staff from stiff old fingers and smashed it against the table.

"There was no Millenial Display planned, was there, *Uncle*?" demanded Saim.

ó Plar drew himself up in frozen dignity. "We had every reason to suspect an accident would . . ."

"One rocket is all it'd take, eh, *Uncle*?" Saim glanced at the others in the room, patted Jeni's shoulder. "One rocket. Other rockets are keyed to defensive systems and would go up to knock down an invading rocket. Fear would take care of the rest."

Jeni said: "Saim, you're frightening me!"

"The whole world's like a mindfield, eh, *Uncle*?" asked Saim. "Just waiting to be set off."

GEORGE straightened, spoke more strongly. "I died. You said . . . virus." He glanced up at Saim, then at the others. "You must be descended from whoever started it."

ó Plar said: "Saim, I don't understand. The Ultimate Conditioning. You've been . . . how can you . . . why don't the inhibitions . . ."

"Let me answer poor George's

questions," said Saim. He slipped into Ancienglis, and the others stared at the fluidity with which he spoke. It wasn't like the thin Educator-veneer over Haribic at all.

"We don't know if it *was* started, George," said Saim. "The virus killed almost every adult. There was an immunity among children below the ages of 12-13-14. Below 12 the virus didn't strike. It took a few 13-year-olds, more 14-year-olds. Above 14 it took all but a small group of adults."

"You can't know this," protested ó Plar. "The last time, when you came out of the *kabak* . . ."

"Be quiet, *Uncle*," said Saim.

George said: "You spoke of some adults pulling through it. Why didn't they get it?"

"They were a sect of Buddhist monks in Arkansas. They'd built themselves a shelter. They expected a war and wanted to preserve their teachings for the survivors."

"You must not bring the names of the Eight Patriarch Bodhisattvas into this room!" protested ó Plar. He felt a giant outrage. *The violence! The defilement!*

"The Bodhisattvas," mused Saim. "Arthur Washington, Lincoln Howorth, Adoula Sampson, Samuael . . ."

"Saim, please!" begged ó Plar, and he stood there trembling be-

tween his human hope and his conditioned impulses.

Saim's voice softened. "It's all right, my friend. The dying days are gone. I'm just working myself up to it."

ó Plar closed his eyes, unable to act because that would require violence, but still impelled by *ka-bah* demands. The dangerous alternative was to resign himself to negative thought. He let the accident prayer well up into consciousness.

BUT I was in a shelter," said George. "And I got this virus. How is that possible?"

"You probably had contact with people from the outside," said Saim. "Our Patriarchs didn't. They were in their shelter, breathing filtered air, when the virus came. They didn't even know of it. They stayed there, deep in contemplation until long after the virus was past. Thus did Lord Buddha preserve them. For when they emerged, there were only children in the world."

"Only children," murmured George. "Then my kids, and my wife, all . . ." He broke off, and for a long moment stared up at Saim. Presently, he said in a flat voice: "My world's gone, isn't it?"

"Gone, agreed Saim. "And while it had its share of mistakes, we made a bigger one."

ó Katje said: "Profanity!"

SAIM ignored her. "There was an electronics specialist among our Patriarchs," he said. "He thought he could enforce peace forevermore. To do this, he built an instrument that shocks the primitive part of the human mind. The shocks revive terrors from the womb. With this you can introduce terrible enforcements for any behavior desired. The staff you saw me break? That's a relatively mild form of this instrument. A reminder."

"What behavior?" whispered George. He felt a sense of mounting horror at the logical projection of what Saim had said.

"Aversion to violence," said Saim. "That was the basic idea. It got out of hand for a stupidly simple reason that our Patriarch Samuael should have foreseen."

"Saim, Saim," whispered ó Plar. "I cannot hold out much longer."

"Patience," said Saim. He faced George. "Do you see it? Many things can be interpreted as violent: Surgery. Sex. Loud noises. Each year the list grows longer and the number of humans grows smaller. There are some the *ka-bah* tanks cannot revive. The flesh is there, but the will is gone."

ó Katje clasped her hands in front of her, said: "Saim, how can you do this terrible . . ."

"An accident," said Saim.

"Eh, *Uncle*?" He glanced at the bowed head of ó Plar. "That's what you've hoped for, isn't it? Deep down where the *kabah* room never quite touches? Down where the little voices whisper and protest?"

"Accident," said Ren. "ó Katje said something about an accident."

"What's this about *kabah* room and accident?" demanded George. "What the hell's a *kabah*?"

S AIM looked at the ceiling, then to the door on his right. Out there—the hall, another room, the control panel he'd seen George operating. His memory focused on a red handle. That'd be the one, of course. Even without George's example, he'd have known. His hands would have known what they had probed and studied to exhaustion.

"Won't anybody explain anything?" demanded George.

*A few more moments won't matter*, thought Saim. He said: "The *kabah* room? That's the great granddaddy of the staffs. That's the personality carver, the shaper, the twister, the . . ."

"Stop it!" screamed ó Katje.

"Help her, Ren," said Saim.

Ren shook himself out of his shock, moved to ó Katje's side.

"Don't touch me!" she hissed.

"You'll take a tranquillizer," said Saim.

It was a flat, no-nonsense command. She found herself taking a pill from Ren's palm, gulping it. The others waited for her to sink back against her chair.

Saim returned his attention to George. "I'm stalling, of course. I've a job to do."

"You'll do it?" whispered ó Plar.

"I'll do it."

George said: "This *kabah*, this instrument you . . ."

"Ultimate Conditioning," said Saim. Priests and Priestesses must go through it each year. Renewal. If your unconscious protest at the way of things isn't too strong, you get some new personality carving, and you're sent out to live another year, and to herd the flock."

"Saim?" pleaded Jeni. "You *are* Saim, aren't you?"

"I'm Saim," he said, but he kept his attention on George. "So that's how it is, George. Each year the shepherds are re-examined for deviation from the non-violent norm. If you fail . . ." He hesitated. ". . . you lose all your memories, and you spend some time in a big *kabah* rejuvenation tank. When a doctor brings you out of the tank, you're farmed out and raised just like a child." He turned to ó Plar. "Isn't that right, *Uncle*?"

"Please, Saim?" begged ó Plar. "What you're doing to my inhi . . ."

THE explosion!" said Jeni. She rose half out of her chair. "When you died, and I made Ren steal a *kabak* tank to . . . That's what did it. We couldn't understand. For a time, you spoke like a Priest, and acted like Priest and . . ."

"Then you went blank," said Ren. "And later, you were Saim again."

"Saim!" whispered Jeni. "You were a Priest who failed in the *kabak*!"

Again, Saim patted Jeni's shoulder. "Ren's tank renewed old patterns with the recent ones, but the *kabak* erasure of my memories was recent and strong. Ren contributed to this moment by not connecting the suppressors in the tank. I suspect he didn't know what they were."

"What could we have been thinking of?" whispered Ren. Shame and guilt were submerged in him, cowering behind a massive sense of horror. The fact that he knew this horror came from conditioning helped not at all. "Revive the science of the Elders? Revive violence?"

"I'm beginning to see it," mused George. "A thousand years of this? Christ!"

"What we overlooked when we built the first *kabak* rooms," said Saim. "This is a violent universe.

It takes a certain amount of violence to survive in it. But the conditioning prevents violence according to increasingly limited interpretations. In ultimate silence, dropping a pin is violent. The more peaceful we became, the narrower became the interpretation of violence. But if you subtract all violence . . . that's death."

Again, Saim patted Jeni's shoulder. "Well, I was hoping somewhat that George would . . . but, no, this is my job." He took a deep breath. "Yes. My job. I'd suggest you all stay down here under cover where you'll be safe from the Millennial Display. Soon, now, the *kabak* rooms will be gone."

ô Plar stood up, spoke slowly against his inhibitions: "You . . . are . . . going . . . to . . . explode . . . the . . . weapons?"

"I'm going to send them winging," said Saim. It was an almost non-committal statement in its tone.

"But all that death," whispered Jeni. "Saim, think of all the people who'll die!"

"That's all right," said Saim. "They've died before."

And he turned, walked toward the door into the hall. *My name is Samuel*, he thought. *Patriarch Samuel*.

THE END

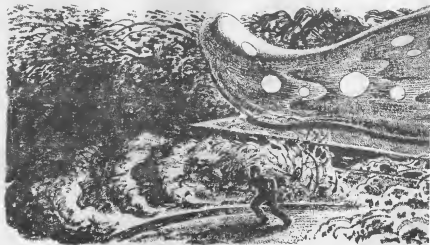
# *The Thousand Dreams of Stellavista*

By J. G. BALLARD

Illustrated by FINLAY

*Today's house-hunter has only minor problems: the schools, the taxes, the neighbors, the mortgage. But in a world of psychotropic houses—where the very walls respond to the emotions of those who live (and lived) in them—buying the right house can be a matter of life and death.*

NO-ONE ever comes to Vermilion Sands now, and I suppose there are few people who have even heard of it, but ten years ago, when Fay and I first went to live at 99 Stellavista, just







before our marriage broke up, the colony was still remembered as the one-time playground of movie czars, delinquent heiresses and eccentric cosmopolites in those fabulous years before the Recess. Admittedly most of the abstract villas and fake palazzos were empty, their huge gardens overgrown, two-level swimming pools long drained, and the whole place was degenerating like an abandoned amusement park, but there was enough bizarre extravagance in the air to make one realize that the giants had only just departed.

I remember the day we first drove down Stellavista in the property agent's car, and how exhilarated Fay and I were, despite our bogus front of bourgeois respectability. Fay, I think, was even a little awed—one or two of the big names were living on behind the shuttered terraces—and we must have been the easiest prospects the young agent had seen for months.

Presumably this was why he tried to work off the really weird places first. The half dozen we saw to begin with were obviously the old regulars, faithfully paraded in the hope that some unwary client might be staggered into buying one of them, or failing that, temporarily lose all standards of comparison and take the first tolerably conventional pile to come along.

One, just off Stellavista and M, would have shaken even an old-guard surrealist on a heroin swing. Screened from the road by a mass of dusty rhododendrons, it consisted of six huge aluminium-shelled spheres suspended like the elements of a mobile from an enormous concrete davit. The largest sphere contained the lounge, the others, successively smaller and spiralling upward into the air, the bedrooms and kitchen. Many of the hull plates had been holed, and the entire slightly tarnished structure hung down into the weeds poking through the cracked concrete court like a collection of forgotten space-ships in a vacant lot.

STAMERS, the agent, left us sitting in the car, partly shielded by the rhododendrons, ran across to the entrance and switched the place on (all the houses in Vermilion Sands, it goes without saying, were psychotropic). There was a dim whirring, and the spheres tipped and began to rotate, brushing against the undergrowth.

Fay sat in the car, staring up in amazement at this awful, beautiful thing, but out of curiosity I got out and walked over to the entrance, the main sphere slowing as I approached, uncertainly steering a course toward me, the smaller ones following.

According to the descriptive brochure, the house had been built eight years earlier for a TV mogul as a weekend retreat. The pedigree was a long one, through two movie starlets, a psychiatrist, an ultrasonic composer (the late Dmitri Shochmann—a notorious madman, I remembered that he invited a score of guests to his suicide party, but no-one had turned up to watch. Chagrined, he bungled the attempt) and an automobile stylist. With such an overlay of more or less blue-chip responses built into it, the house should have been snapped up within a week, even in Vermilion Sands; to have been on the market for several months, if not years, indicated that the previous tenants had been none too happy there.

Ten feet from me, the main sphere hovered uncertainly, the entrance extending downwards. Stammers stood in the open doorway, smiling encouragingly, but the house seemed nervous of something. As I stepped forward it suddenly jerked away, almost in alarm, the entrance retracting and sending a low shudder through the rest of the spheres.

It's always interesting to watch a psychotropic house try to adjust itself to strangers, particularly those at all guarded or suspicious. The responses vary, a blend of past reactions to nega-

tive emotions, the hostility of the previous tenants, a traumatic encounter with a bailiff or burglar (though both these usually stay well away from PT houses; the dangers of an inverting balcony or the sudden deflatus of a corridor are too great). The initial reaction can be a surer indication of a house's true condition than any amount of sales talk about horse-power and moduli of elasticity.

THIS one was definitely on the defensive. When I climbed up onto the entrance Stammers was fiddling desperately with the control console recessed into the wall behind the door, damping the volume down as low as possible. Usually a property agent will select medium/full, trying to heighten the PT responses.

He smiled thinly at me. "Circuits are a little worn. Nothing serious, we'll replace them on contract. Some of the previous owners were show business people, had an over-simplified view of the full life."

I nodded, walking through onto the balcony which ringed the wide sunken lounge. It was a beautiful room all right, with opaque plastex walls and white fluo-glass ceiling, but something terrible had happened there. As it responded to me, the ceiling lifting slightly and the walls growing less opaque, reflecting

my perspective-seeking eye, I noticed that curious mottled knots were forming, indicating where the room had been strained and healed faultily. Deep hidden rifts began to distort the sphere, ballooning out one of the alcoves like a bubble of over-extended gum.

Stamers tapped my elbow.

"Lively responses, aren't they, Mr. Talbot?" He put his hand on the wall behind us. The plastex swam and whirled like boiling toothpaste, then extruded itself into a small ledge. Stamers sat down on the lip, which quickly expanded to match the contours of his body, providing back and arm rests. "Sit down and relax, Mr. Talbot, let yourself feel at home here."

The seat cushioned up around me like an enormous white hand, and immediately the walls and ceiling quietened—obviously Stamers' first job was to get his clients off their feet before their restless shuffling could do any damage. Someone living there must have put in a lot of anguished pacing and knuckle-cracking.

OF course, you're getting nothing but custom-built units here," Stamers said. "The vinyl chains in this plastex were hand-crafted literally molecule by molecule."

I felt the room shift around

me. The ceiling was dilating and contracting in steady pulses, an absurdly exaggerated response to our own respiratory rhythms, but the motions were overlayed by sharp transverse spasms, feed-back from some cardiac ailment.

The house was not only frightened of us, it was seriously ill. Somebody, Dmitri Shochmann perhaps, overflowing with self-hate, had committed an appalling injury to himself, and the house was recapitulating its previous response. I was about to ask Stamers if the suicide party had been staged here when he sat up and looked around fretfully.

At the same time my ears started to sing. Mysteriously, the air pressure inside the lounge was building up, gusts of old grit whirling out into the hallway towards the exit.

Stamers was on his feet, the seat telescoping back into the wall.

"Er, Mr. Talbot, let's stroll around the garden, give you the feel of—"

He broke off, face creased in alarm. The ceiling was only five feet above our heads, contracting like a huge white bladder.

"—explosive decompression," Stamers finished automatically, taking my arm quickly. "I don't understand this," he muttered as we ran out into the hallway, the air whooshing past us.

I had a shrewd idea what was happening, and sure enough we found Fay peering into the control console, swinging the volume tabs.

Stamers dived past her. We were almost dragged back into the lounge as the ceiling began its outward leg and sucked the air in through the doorway, but just in time he reached the emergency panel and switched the house off.

Wide-eyed, he buttoned his shirt up, nodding to Fay. "That was close, Mrs. Talbot, that was really close." He gave a light hysterical laugh.

As we walked back to the car, the giant spheres resting among the weeds, he said: "Well, Mr. Talbot, it's a fine property. A remarkable pedigree for a house only eight years old. An exciting challenge, you know, a new dimension in living."

I gave him a weak smile. "Maybe, but it's not exactly *us*, is it?"

WE had come to Vermillion Sands for two years, while I opened a law office in downtown Red Beach twenty miles away. Apart from the dust, smog and inflationary prices of real estate in Red Beach, a strong motive for coming out to Vermillion Sands was that any number of potential clients were mouldering away there in the

old mansions—forgotten movie queens, lonely impresarios and the like, some of the most litigious people in the world. Once installed, I could make my rounds of the bridge tables and dinner parties, tactfully stimulating a little righteous will-paring and contract-breaking.

However, as we drove down Stellavista on our inspection tour I wondered if we'd find anywhere suitable. Rapidly we went through a mock Assyrian ziggurat (the last owner had suffered from St. Vitus's Dance, and the whole structure still jittered like a galvanized Tower of Pisa), and a converted submarine pen (here the problem had been alcoholism, we could *feel* the gloom and helplessness come down off those huge damp walls soaring up into the darkness).

Finally Stamers gave up and brought us back to earth. Unfortunately his more conventional properties were little better. The real trouble was that most of Vermillion Sands is composed of early, or primitive-fantastic, period psychotropic, when the possibilities offered by the new bioplastic medium rather went to architects' heads. It was some years before a compromise was reached between the 100% responsive structure and the rigid non-responsive houses of the past. The first PT houses had so many senso-cells distributed over

them, echoing every shift of mood and position of the occupants, that living in one was like inhabiting someone else's brain.

UNLUCKILY bioplastics need a lot of exercise or they grow rigid and crack, and many people believe that PT buildings are still given unnecessarily subtle memories and are far too sensitive—there's the apocryphal story of the millionaire of plebian origins who was literally frozen out of a million-dollar mansion he had bought from an aristocratic family. The place had been trained to respond to their habitual rudeness and bad temper, and reacted discordantly when re-adjusting itself to the millionaire, unintentionally parodying his soft-spoken politeness.

But although the echoes of previous tenants can be intrusive, this naturally has its advantages. Many medium-priced PT homes resonate with the bygone laughter of happy families, the relaxed harmony of a successful marriage. It was something like this that I wanted for Fay and myself. In the previous year our relationship had begun to fade a little, and a really well-integrated house with a healthy set of reflexes—say, those of a prosperous bank president and his devoted spouse—would go a long way towards healing the rifts between us.

Leafing through the brochures when we reached the end of Stellavista I could see that domesticated bank presidents had been in short supply at Vermilion Sands. The pedigrees were either packed with ulcer-ridden, quadri-divorced TV executives, or discreetly blank.

99 Stellavista was in the latter category. As we climbed out of the car and walked up the short drive I searched the pedigree for data on the past tenants, but only the original owner was given: a Miss Emma Slack, psychic orientation unstated.

That it was a woman's house was obvious. Shaped like an enormous orchid, it was set back on a low concrete dais in the center of a trim blue gravel court, the white plastex wings, which carried the lounge on one side and the master bedroom on the other, spanning out across the magnolias on the far side of the drive. Between the two wings, on the first floor, was an open terrace around a small heart-shaped swim-pool. The terrace ran back to the central bulb, a three-story segment containing the chauffeur's apartment and a vast two-decker kitchen.

The house seemed to be in good condition. While we parked I looked up at the white wings fanning out above us, and the plastex was unscarred, its thin

seams running smoothly to the far rim like the veins of a giant leaf.

Curiously, Stammers was in no hurry to switch on. He pointed to left and right as we made our way up the glass staircase to the terrace, underlining various attractive features, but made no effort to find the control console, and I suspected that the house might be a static conversion—a fair number of PT houses are frozen in one or other position at the end of their working lives, and make tolerable static homes.

"It's not bad," I admitted, looking out across the powder-blue water as Stammers piled on the superlatives. Through the glass bottom of the pool the car parked below loomed like a colored whale asleep on the ocean bed. "This is the sort of thing, all right. But what about switching it on?"

Stammers stepped around me and headed off after Fay. "You'll want to see the kitchen first, Mr. Talbot. There's no hurry, let yourself feel at home here."

THE kitchen was fabulous, banks of gleaming control panels and auto units. Everything was recessed and stylized, blending into the over-all color scheme, complex gadgets folding back into self-sealing cabinets. Boiling an egg there would have taken me a couple of days.

"Quite a plant," I commented. Fay wandered around in a daze of delight, automatically fingering the chrome. "Looks as if it's tooled up to produce penicillin." I tapped the brochure. "But why so cheap? At 25 thousand it's damn nearly being given away."

Stammers eyes brightened. He flashed me a broad conspiratorial smile which indicated that this was *my* year, *my* day. Taking me off on a tour of the rumpus room and library, he began to hammer home the merits of the house, extolling his company's 35-year easy-purchase plan (they wanted anything except cash—there was no money in that) and the beauty and simplicity of the garden (mostly flexible polyurethane perennials).

Finally, apparently convinced that I was sold, he switched the house on.

WELL, I didn't know then what it was, but something strange had taken place in that house. Emma Slack had certainly been a woman with a powerful and oblique personality. As I walked slowly around the empty lounge, feeling the walls angle and edge away, doorways widen when I approached, curious echoes stirred through the memories embedded in the house. The responses were undefined, but somehow eerie and unsettling, like being continually watched

over one's shoulder, each room adjusting itself to my soft random footsteps as if they contained the possibility of some explosive burst of passion or temperament.

Inclining my head, however, I seemed to hear other echoes, delicate and feminine, a graceful swirl of movement reflected in a brief fluid sweep in one corner, the decorous unfolding of an archway or recess.

Then, abruptly, the mood would invert, and the hollow eeriness return.

Fay touched my arm. "Howard, it's strange."

I shrugged. "Interesting, though. Remember, our own responses will overlay these within a few days."

Fay shook her head. "I couldn't stand it, Howard. Mr. Stammers must have something normal."

"Darling, Vermilion Sands is Vermilion Sands. Don't expect to find the suburban norms. People here were individualists."

I looked down at Fay. Her small oval face, with its childlike mouth and chin, the fringe of blond hair and pert nose, seemed lost and anxious, and I realized that Fay was just a suburban housewife who felt out of place trying to live up to the exotic flora of Vermilion Sands.

I put my arm around her shoulder. "O.K., sweetie, you're

quite right. Let's find somewhere we can put our feet up and relax, be ourselves. Now, what are we going to say to Stammers?"

**S**URPRISINGLY, Stammers didn't seem all that disappointed. When I shook my head he put up a token protest but soon gave in and switched off the house.

"I know how Mrs. Talbot feels," he conceded as we went down the staircase. "Some of these places have got too much personality built into them. Living with someone like Gloria Tremayne isn't too easy."

I stopped, two steps from the bottom, a curious ripple of recognition running through my mind.

"Gloria Tremayne? I thought the only owner was a Miss Emma Slack."

Stammers nodded. "Yeah. Gloria Tremayne. Emma Slack was her real name. Don't say I told you, though everybody living around here knows it. We keep it quiet as long as we can. If we said Gloria Tremayne no-one would even look at the place."

"Gloria Tremayne," Fay repeated, puzzled. "She was the movie star who shot her husband, wasn't she? He was a famous architect—Howard, weren't you on that case?"

As Fay's voice chattered on I turned and looked up the stair-



case towards the sun-lounge, my mind casting itself back ten years to one of the most famous trials of the decade, whose course and verdict were as much as anything else to mark the end of a whole generation, and show up the irresponsibilities of the world before the Recess. Even though Gloria Tremayne had been acquitted, everyone knew that she had cold-bloodedly murdered her husband, the architect Miles Vanden Starr, as he lay asleep, and only the silver-tongued pleading of Daniel Hammett, her defense attorney, assisted by a young man called Howard Talbot, had saved her.

I said to Fay: "Yes, I helped to defend her. It seems a long time ago. Angel, you wait in the car. I want to check something."

Before she could follow me I ran up the staircase onto the terrace and closed the glass double doors behind me. Inert and unresponsive now, the white walls rose into the sky on either side of the pool. The water was motionless, a transparent block of condensed time, through which I could see the drowned images of Fay and Stammers sitting in the car, for a moment, as I thought of Gloria Tremayne, like an embalmed fragment of my future.

FOR three weeks, during her trial ten years earlier, I sat only a few feet from Gloria Tre-

mayne, and like everyone else in that crowded courtroom I would never forget her cool mask-like face, the composed eyes that examined each of the witnesses as they gave their testimony—chauffeur, police surgeon, neighbors who heard the shots—like a brilliant spider arraigned by its victims, never once showing any emotion or response. As they dismembered her web, skein by skein, she sat impassively at its center, giving Hammett no encouragement, content to repose in the image of herself ("The Ice Face") projected across the globe for the previous 15 years.

Perhaps in the end this saved her, the jury unable to outstare the enigma. To be honest, by the last week of the trial I had lost all interest in it. As I steered Hammett through his brief, opening and shutting his red wooden suitcase (the Hammett hallmark, it was an excellent jury distractor) whenever he indicated, my attention was fixed completely on Gloria Tremayne, trying to find some flaw in the mask through which I could glimpse her personality. I suppose that I was just another naive young man who had fallen in love with a myth manufactured by a thousand publicity agents, but for me the sensation was the real thing, and when she was acquitted the world began to revolve again.

That justice had been flouted mattered nothing. Hammett, curiously, believed her innocent. Like many successful lawyers he had based his career on the principle of prosecuting the guilty and defending the innocent—this way he was sure of a sufficiently high proportion of successes to give him a reputation for being brilliant and unbeatable. When he defended Gloria Tremayne most lawyers thought he had been tempted to depart from principle by a fat bribe from her studio, but in fact he volunteered to take the case. Perhaps he, too, was working off a secret infatuation.

Of course, I never saw her again. As soon as her next picture had been safely released her studio dropped her. Later she briefly reappeared on a narcotics charge after a car smash, and then disappeared into a limbo of alcoholics hospitals and psychowards. When she died five years afterwards few newspapers gave her more than a couple of lines.

**B**ELOW, Stammers sounded the horn. Leisurely I retraced my way through the lounge and bedrooms, scanning the empty floors, running my hands over the smooth plastex walls, bracing myself to feel again the impact of Gloria Tremayne's personality. Blissfully, her presence would be everywhere in the

house, a thousand echoes of her distilled into every matrix and senso-cell, each moment of emotion blended into a replica of her more intimate than anyone, apart from her dead husband, could ever know. The Gloria Tremayne with whom I had become infatuated had ceased to exist, but this house was the shrine that entombed the very signatures of her soul.

**T**O begin with everything went quietly. Fay remonstrated with me, but I promised her a new mink wrap out of the savings we made on the house. Secondly, I was careful to keep the volume down for the first few weeks, so that there would be no clash of feminine wills—one major problem of psychotropic houses is that after several months one has to increase the volume to get the same image of the last owner, and this increases the sensitivity of the memory cells and their rate of contamination. At the same time, magnifying the psychic underlay emphasizes the cruder emotional ground-base, one begins to taste the lees rather than the distilled cream of the previous tenancy. I wanted to savor the quintessence of Gloria Tremayne as long as possible so I deliberately rationed myself, turning the volume down during the day while I was out, then switching on only

those rooms in which I sat in the evenings.

Right from the outset I was neglecting Fay. Not only were we both preoccupied with the usual problems of psychic adjustment faced by every married couple moving into a new house—undressing in the master bedroom that first night was a positive honeymoon debut all over again—but I was completely immersed in the strange and exhilarating persona of Gloria Tremayne, exploring every alcove and niche in search of her.

In the evenings I sat in the library, feeling her around me in the gently stirring walls, hovering nearby as I emptied the packing cases like an attendant succubus. Sipping my Scotch while night closed in over the dark blue pool, I carefully analyzed her personality, deliberately varying my moods to evoke as wide a range of responses. The memory cells in the house were perfectly bonded, never revealing any flaws of character, always reposed and self-controlled. If I leapt out of my chair and switched the stereogram abruptly from Stravinsky to Stan Kenton to the MJQ, the room adjusted its mood and tempo without effort.

And yet how long was it before I discovered that there was another personality present in that house, and began to feel the curi-

ous eeriness Fay and I had noticed, like everyone else, as soon as Stammers switched the house on? Not for a few weeks, when the house was still responding to my star-struck idealism. While my devotion to the parted spirit of Gloria Tremayne was the dominant mood, the house played itself back accordingly, recapitulating only the more serene aspects of Gloria Tremayne's character.

Soon, however, the mirror was to darken.

IT was Fay who broke the spell. She quickly realized that the initial responses were being overlaid by others from a more mellow and, from her point of view, more dangerous quarter of the past. After doing her best to put up with them she made a few guarded attempts to freeze Gloria out, switching the volume controls up and down, selecting the maximum of base lift—which stressed the masculine responses—and the minimum of alto lift.

One morning I caught her on her knees by the console, poking a screwdriver at the memory drum, apparently in an effort to erase the entire store.

Taking it from her, I locked the unit and hooked the key onto my chain.

"Darling, the mortgage company could sue us for destroying

the pedigree. Without it this house would be valueless. What are you trying to do?"

Fay dusted her hands on her skirt and stared me straight in the eye, chin jutting.

"I'm trying to restore a little sanity here, Howard; if possible, find my own marriage again. I thought it might be in there somewhere."

I put my arm around her, steered her back towards the kitchen. "Darling, you're getting over-intuitive again. Just relax, don't try to upset everything."

"Upset—? Howard, what are you talking about? Haven't I a right to my own husband? I'm sick of sharing him with a homicidal neurotic who died five years ago. It's positively ghoulish!"

I winced as she snapped this out, feeling the walls in the hallway darken and retreat defensively. The air became clouded and frenetic, like a dull storm-filled day. . .

"Fay, you know your talent for exaggeration: . . ." I searched around for the kitchen, momentarily disoriented as the corridor walls shifted and backed. "You don't know how lucky you—"

I didn't get any further before she interrupted. Within five seconds we were in the middle of a blistering row. Fay threw all caution to the winds, deliberately, I think, in the hope of damaging the house permanent-

ly, while I stupidly let a lot of my unconscious resentment towards her come out. Finally she stormed away into her bedroom and I stamped back into the shattered lounge and slumped down angrily on the sofa.

ABOVE me the ceiling flexed and quivered, the color of roof slates, here and there mottled by angry veins that bunched the walls in on each other. The air pressure mounted but I felt too tired to open a window and sat stewing in a pit of black anger.

It must have been then that I recognized the presence of Miles Vanden Starr. All echoes of Gloria Tremayne's personality had vanished, and for the first time since moving in I had recovered my normal perspectives. The mood of anger and resentment in the lounge was remarkably persistent, far longer than expected from what had been little more than a tiff. The walls continued to pulse and knot for over half an hour, long after my own irritation had faded and I was sitting up and examining the room clear-headedly.

The anger, deep and frustrated, was obviously masculine, and I assumed, correctly, that the original source had been Vanden Starr, who had designed the house for Gloria Tremayne and lived there for over a year

before his death. To have so grooved the memory drum meant that this atmosphere of blind, neurotic hostility had been maintained for most of that time.

As the resentment slowly dispersed I could see that for the time being Fay had succeeded in her object. The serene persona of Gloria Tremayne had vanished. The feminine motif was still there, in a higher shriller key, but the dominant presence was distinctly Vanden Starr's. This new mood of the house reminded me of the courtroom photographs of him, glowering out of 1950-ish groups with Le Corbusier and Lloyd Wright, stalking about some housing project in Chicago or Tokyo like a petty dictator, heavy-jowled, thyroidal, with large lustreless eyes, and then the Vermilion Sands: 1970 shots of him, fitting into the movie colony like a shark into a gold-fish bowl.

However, he had designed some brilliant architecture, and there was power behind those baleful drives. Cued in by our tantrum, the presence of Vanden Starr had descended upon 99 Stellavista like a thundercloud. At first I tried to re-capture the earlier halcyon mood, but this had disappeared and my irritation at loosing it only served to inflate the thundercloud. An unfortunate aspect of psychotropic houses is the factor of resonance

—diametrically opposed personalities soon stabilize their relationship, the echo inevitably yielding to the new source. But where the personalities are of similar frequency and amplitude they mutually reinforce themselves, each adapting itself for comfort to the personality of the other. All too soon I began to assume the character of Vanden Starr, and my increased exasperation with Fay merely drew from the house a harder front of antagonism.

Later I knew that I was, in fact, treating Fay in exactly the way that Vanden Starr had treated Gloria Tremayne, recapitulating the steps of their tragedy with consequences that were equally disastrous.

FAY recognized the changed mood of the house immediately. "What's happened to our lodger?" she giped at dinner the next evening. "Our beautiful ghost seems to be spurning you. Is the spirit unwilling although the flesh is weak?"

"God knows," I growled testily. "I think you've really messed the place up." I glanced around the dining room for any echo of Gloria Tremayne, but she had gone. Fay went out to the kitchen and I sat over my half-eaten hors d'oeuvres, staring at it blankly, when I felt a curious ripple in the wall behind me, a

silver dart of movement that vanished as soon as I looked up. I tried to focus it without success, the first echo of Gloria since our row, but later that evening, when I went into Fay's bedroom after I heard her crying, I noticed it again.

Fay had gone into the bathroom. About to find her I felt the same echo of feminine anguish. It had been prompted by Fay's tears, but like Vanden Starr's mood set off by my own anger, it persisted long after the original cue. I followed it into the corridor as it faded out of the room but it diffused outwards into the ceiling and hung there motionlessly.

Starting to walk down to the lounge, I realized that the house was watching me like a wounded animal.

**T**WO days later came the attack on Fay.

I had just returned home from the office, childishly annoyed with Fay for parking her car on my side of the garage. In the cloakroom I tried to check my anger; the senso-cells had picked up the cue and began to suck hate and irritation out of me, pouring it back into the air until the walls of the cloakroom darkened and began to seethe.

I shouted some gratuitous insult at Fay, who was in the lounge, then heard her cry out.

A second later she screamed: "Howard! Quickly!"

Running towards the lounge, I flung myself at the door, expecting it to retract. Instead, it remained rigid, frame locked in the archway. The entire house seemed grey and strained, the pool outside like a tank of cold lead.

Fay shouted again. I seized the metal handle of the manual control and wrenched the door back.

Fay was almost out of sight, on one of the slab sofas in the center of the room, buried beneath the sagging canopy of the ceiling which had collapsed onto her. The heavy plastex had flowed together directly above her head, forming a blob a yard in diameter.

Raising the flaccid grey plastex with my hands, I managed to lift it off Fay, who was spread-eagled back into the cushions with only her feet protruding. She wriggled out and flung her arms around me, sobbing noiselessly.

"Howard, this house is insane, I think it's trying to kill me!"

"For heaven's sake, Fay, don't be silly. It was simply a freak accumulation of senso-cells. Your breathing probably set it off." I patted her shoulder, remembering the child I had married a few years earlier. Smiling to myself, I watched the ceiling retract



slowly, the walls grow lighter in tone.

"Howard, can't we leave here?" Fay babbled. "Let's go and live in a static house. I know it's dull, but what does it matter—?"

"Well," I said, "it's not just dull, it's dead. Don't worry, angel, you'll get to like it here."

Fay twisted away from me. "Howard, I can't stay in this house any more. You've been getting so preoccupied recently, you're changing completely." She started to cry again, then pointed at the ceiling. "If I hadn't been lying down, do you realize it would have killed me?"

I nodded, then dusted the end of the sofa. "Yes, I can see your heel marks." Irritation welled up like bile before I could stop it. "I thought I told you not to stretch out here. This isn't a beach, Fay. You know it annoys me."

Around us the walls began to mottle and cloud again.

WHY did Fay anger me so easily? Was it, as I assumed at the time, unconscious resentment that egged me on, or was I merely a vehicle for the antagonism which had accumulated during Vanden Starr's marriage to Gloria Tremayne

and was now venting itself on the hapless couple who followed them to 99 Stellavista? Perhaps I'm over-charitable to myself in assuming the latter, but Fay and I had been tolerably happy during our five years of marriage, and I am sure my nostalgic infatuation for Gloria Tremayne couldn't have so swept me off my feet.

Either way, however, Fay didn't wait for a second attempt. Two days later I came home to find a fresh tape on the kitchen memophone, switched it on to hear her tell me that she could no longer put up with me, my nagging or 99 Stellavista and was going back east to stay with her sister.

Callously, my first reaction, after the initial twinge of indignation, was sheer relief. I still believed that Fay was responsible for Gloria Tremayne's eclipse and the emergence of Vanden Starr, and that with her gone I would recapture the early days of idyll and romance.

I was only partly right. Gloria Tremayne did return, but not in the role expected. I, who had helped to defend her at her trial, should have known better.

A FEW days after Fay left I became aware that the house had taken on a separate existence, its coded memories discharging themselves inde-

pendently of my own behavior. Often when I returned in the evening, eager to relax over half a decanter of Scotch, I would find the ghosts of Miles Vanden Starr and Gloria Tremayne in full flight, Starr's black menacing personality crowding after the tenuous but increasingly resilient quintessence of his wife. This rapier-like resistance could be observed literally—the walls of the lounge would stiffen and darken in a vortex of dull anger that converged upon a small zone of lightness hiding in one of the alcoves, as if to obliterate its presence, but at the last moment Gloria's persona would flit nimbly away, leaving the room to seethe and writhe.

Fay had set off this spirit of resistance, and I visualized Gloria Tremayne going through a similar period of living hell. As her personality re-emerged in its new role I watched it carefully, volume at maximum despite the damage the house might do to itself. Once Stammers stopped by and offered to get the circuits checked for me. He had seen the house from the road, flexing and changing color like an anguished squid. Thanking him, I made up some excuse and declined. (Later he told me that I kicked him out unceremoniously—apparently he hardly recognized me, I was striding around the dark quaking house like a madman in an



Elizabethan horror tragedy, oblivious of everything.)

Although submerged by the personality of Miles Vanden Starr, I gradually realized that Gloria Tremayne had been deliberately driven out of her mind by him. What had prompted his implacable hostility I can only hazard—perhaps he resented her success, perhaps she had been unfaithful to him. When she finally retaliated and shot him it was, I'm sure, an act of self-defense.

TWO months after she went east Fay filed a divorce suit against me. Frantically I telephoned her, explaining I'd be grateful if she held off as the publicity would probably kill the new office. However, Fay was adamant. What annoyed me most was that she sounded better than she had done for years, really happy again. When I pleaded she said she needed the divorce in order to marry again, and then, as a last straw, refused to tell me who the man was.

By the time I slammed the phone down my temper was taking off like a five-stage lunar probe. I left the office early and began a tour of the bars in Red Beach, working my way slowly back to Vermilion Sands. I hit 99 Stellavista like a one-man Siegfried Line, mowing down most of the magnolias in the

drive, ramming the car into the garage on the third pass after wrecking both auto-doors.

My keys jammed in the door lock and I finally had to kick my way through one of the glass panels. Raging upstairs onto the darkened terrace I flung my hat and coat into the pool and then slammed into the lounge. By 2 a.m., as I mixed myself a night-cap at the bar and put the last act of *Gotterdammerung* on the stereogram, the whole place was really warming up.

On the way to bed I lurched into Fay's room to see what damage I could do to the memories I still retained of her, kicked in a wardrobe and booted the matress onto the floor, turning the walls literally blue with a salvo of choice epithets.

Shortly after 3 o'clock, the decanter spilt onto the bed, I fell asleep in my room, the house revolving around me like an enormous turntable.

IT must have been only 4 o'clock when I woke, conscious of a curious silence in the darkened room. I was stretched across the bed, one hand around the neck of the decanter, the other holding a dead cigar stub. The walls were motionless, unstirred by even the residual eddies which drift through a psychotropic house when the occupants are asleep.

Something had altered the normal perspectives of the room. Trying to focus on the grey underswell of the ceiling, I listened for footsteps outside. Sure enough, the corridor wall began to retract slightly, the archway, usually a six-inch wide slit, rising to admit someone. Nothing came through, but the room expanded to accommodate an additional presence, the ceiling ballooning upwards. Astounded, I tried not to move my head, watching the unoccupied pressure zone move quickly across the room towards the bed, its motion shadowed by a small dome in the ceiling.

The pressure zone paused at the foot of the bed and hesitated for a few seconds. But instead of stabilizing, the walls began to vibrate rapidly, quivering with strange uncertain tremors, radiating a sensation of acute urgency and indecision.

Then, abruptly, the room stilled. A second later, as I lifted myself up on one elbow, a violent spasm convulsed the room, buckling the walls and lifting the bed off the floor. The entire house started to shake and writhe. Gripped by this seizure, the bedroom contracted and expanded like the chamber of a dying heart, the ceiling rising and falling, floor yawing.

I steadied myself on the swinging bed and gradually the con-

vulsion died away, the walls realigning. I stood up, wondering what insane crisis this psychotropic *grande mal* duplicated, and bumped my head sharply on the ceiling.

The room was in darkness, thin moonlight coming through the trio of small circular vents behind the bed. These were contracting as the walls closed in on each other. Pressing my hands against the ceiling, I felt it push downwards strongly. The edges of the floor were blending into the walls as the room converted itself into a sphere.

THE air pressure mounted. I stumbled over to the vents, reached them as they clamped around my fists, air whistling out through my fingers. Face against the openings, I gulped in the cool night air, then tried to force apart the locking plastex.

The safety cut-out switch was above the door on the other side of the room. I dived across to it, clambering over the tilting bed, but the flowing plastex had submerged the whole unit.

Head bent to avoid the ceiling, I pulled off my tie, gasping at the thudding air. Trapped in the room, I was suffocating as it duplicated the expiring breaths of Vanden Starr after he had been shot. The tremendous spasm had been his convulsive reaction as the bullet from Gloria

Tremayne's gun had crashed into his chest.

I fumbled in my pockets for a knife, felt my cigarette lighter, then pulled it out and flicked it on. The room was now a grey sphere ten feet in diameter, thick veins, as broad as my arm, knotting across its surface, crushing the end-boards of the bedstead.

Brain pounding, I raised the lighter to the surface of the ceiling, let it play across the opaque fluo-glass. Immediately it began to fizz and bubble, suddenly flared alight and split apart, the two burning lips unzipping in a brilliant discharge of heat.

As the cocoon bisected itself, I could see the twisted mouth of the corridor bending down into the room, below the sagging outline of the dining room ceiling. Feet skating in the molten plastex, I pulled myself up onto the corridor. The whole house seemed to have been ruptured. Walls were buckled, floors furling at their edges, water pouring out of the pool as the unit tipped forwards on the weakened foundations. The glass slabs of the staircase had been shattered, the razor-like teeth jutting out of the wall.

I ran into Fay's bedroom, found the cut-out switch and stabbed the sprinkler alarm.

The house was still throbbing slightly, but a moment later it locked and became rigid. I leaned

against the dented wall and let the spray pour across my face from the sprinkler jets.

Around me, its wings torn and disarrayed, the house reared up like a tortured flower.

STANDING in the middle of one of the trampled flower beds, Stammers gazed up at the house, an expression of awe and bewilderment on his face. It was just after 6 o'clock and the last of the three police cars had driven off, the lieutenant in charge finally conceding defeat. "Dammit, I can't arrest a house for attempted homicide, can I?" he'd asked me somewhat belligerently. I roared with laughter at this, my initial feelings of shock having given way to an almost hysterical sense of fun.

Stammers found me equally difficult to understand.

"What on earth were you doing in there?" he asked, voice down to a whisper.

"Nothing. I tell you I was fast asleep. And relax. The house can't hear you. It's switched off."

We wandered across the churned gravel and waded through the water which lay like a huge black mirror across the front half of the lawn. Stammers shook his head. The house looked like a surrealist nightmare, all the perspectives slipped, angles displaced.

"The place must have been insane," Stammers murmured. "If you ask me it needs a psychiatrist to straighten it out."

"You're right there," I told him. "In fact, that was exactly my role—to reconstruct the original traumatic situation in order to release the repressed material."

"Why joke about it? It tried to kill you."

"Don't be absurd. The real culprit is Vanden Starr, but as the lieutenant implied, you can't arrest a man who's been dead for ten years. It was the pent-up memory of his death which finally erupted from the house's memory and tried to kill me. Even if Gloria Tremayne was driven in to pulling the trigger, Starr pointed the gun. Believe me, I lived out his role for a couple of months. What worries me is that if Fay hadn't had enough good sense to leave me she might have been hypnotized by the persona of Gloria Tremayne into killing *me*, and probably would have died for it."

MUCH to Stammers' surprise, I decided to stay on at 99 Stellavista. Apart from the fact that I hadn't enough cash to buy another place, the house had certain undeniable memories for me that I didn't want to forsake. Gloria Tremayne was still there,

and I was sure that Vanden Starr had at last gone. The kitchen and service units were still functional, and apart from the weird contorted shapes most of the rooms were habitable. In addition I needed a rest, and there's nothing so quiet as a static house.

Of course, in its present form 99 Stellavista can hardly be regarded as a typical static dwelling. Yet, the deformed rooms and twisted corridors have as much personality as any psychotropic house.

The PT unit is still working and one day I shall switch it on again. But one thing worries me. The violent spasms which ruptured the house may in some way have damaged Gloria Tremayne's personality, and the tortured walls and ceilings reflect the twisted partitions of her now warped mind. To live with it might well be madness for me, as there's a subtle captivating charm about the house even in its distorted form, like the ambiguous smile of a beautiful but insane woman.

Often I unlock the control console and examine the memory drum. Her personality, whatever it may be, is there. Nothing would be simpler than to erase it. But I can't.

One day soon, whatever the outcome, I know that I shall have to switch the house on again.

# *The Wizard of Light*

By DAVID ELY

Illustrated by ADKINS

***For Sampson to destroy the Philistines, he had to  
bring their very temple crashing to the ground.  
But for Dr. Brawl to destroy the culture-mon-  
gers, he needed merely a monstrous easel.***

THE old man's tour of the art museums was quite an amusing spectacle. Indeed, it became a standing joke among those polite and cultivated gentlemen whose chief function in life is to obtain and display great paintings. They were accustomed to dealing with eccentric members of the public—but never had they witnessed anything to match the ludicrous performance of old Dr. Brawl! (Of course, they carefully concealed their mirth, for Dr. Brawl was far too rich to be laughed at openly; and after all, he might decide some day to honor the museums with bequests from the fortune he had amassed with his remarkable inventions in the field of op-

tics, which had earned him the sobriquet, the Wizard of Light.)

Dr. Brawl was a copyist. He had his easel, his brushes and his paints. He had a little smock, too, and a beret that perched on his bald dome. But he had not the slightest resemblance to any of the other earnest amateurs who sat dutifully daubing their canvases in imitation of the masterpieces that hung before them. No, Dr. Brawl was different!

He would arrive at a museum in princely fashion, in an enormous black limousine. Two liveried servants would lug in his easel, another would carry his encased palette, and Dr. Brawl himself would hobble in on the

arm of a nurse. Then he would sit down grumpily in a folding chair while the easel was being set up by his servants, and glare around at the little crowd that always gathered to watch him.

The easel itself was remarkable. It was a monument in wood and brass and steel, and as massive as an upright piano. It was equipped, moreover, with one of Dr. Browl's own inventions, a bank of mysterious lamps that gave off no visible light, but which presumably bathed each picture he sought to copy in a special radiance seen by him alone, through a great pair of black-lensed spectacles he clapped on his nose.

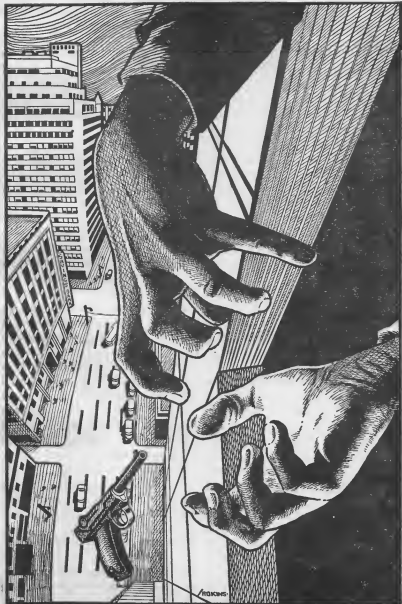
His painting technique was even more bizarre. Dr. Browl would fairly fling the colors from palette to canvas, his little claw-hands darting back and forth with demonic speed. Faster and faster his jerky movements would become, until it seemed that the only remaining step in hastiness would be to hurl the palette itself against the canvas. His copies, naturally, were gross caricatures, and his only accomplishments the spoilage of innocent canvas and good paint.

At this feverish pace, he would copy one masterpiece after another. Often he would manage to work his way through an entire collection in a single day. He required only two weeks, for

example, to make a complete round of the Louvre, with its many thousands of paintings, neglecting to copy not a single one. His energy and industry were without parallel. Within the space of two years, his pellmell progress had carried him through every significant art repository in the Western world.

Dr. Browl's fanatic devotion to painting seemed beyond explanation. Some said it was merely a lamentable aberration. Others suggested the existence of a guilt complex, for it was rumored that the old man had once burned his own small art collection in a fit of senile rage. But Dr. Browl seemed far from being guilt-ridden. From time to time, as his servants would shift the heavy easel to a new location, he would lower his black spectacles and briefly eye the amused bystanders. A strange look, the old man had. Ironical, and contemptuous, too; but more than that, for there would sometimes be a devilish gleam of mockery there that suggested some wild, wicked humor. The people were snickering at him, were they? Well, it would seem that he was barely able to contain his own laughter at them!

IT WAS in the spring of 1961 that Dr. Browl completed his remarkable tour of museums and galleries. The first series of inci-



dents, however, did not occur until slightly more than a year later.

One bright June morning, a van stopped in front of the offices of the London art dealers, Bouser & Baillie. Two workmen delivered a large flat crate which proved to contain Manet's famous "Boy With Drum," recently returned to its owner, the Countess Palumbo, from an exhibit at the National Gallery. But Bouser & Baillie found no note attached to explain why the Countess had sent it. Was it to be loaned to another exhibit, was it to be sold, or was it simply to be cleaned?

Perforce, Bouser & Baillie telephoned their client at her Norfolk estate, and with suitable apologies, requested instructions. The Countess was annoyed. What was this nonsense about "Boy With Drum"? She had no intention of exhibiting it or selling it or having it cleaned, and in fact, had not sent it at all. The picture was hanging right in her drawing-room at that very moment, in its accustomed place. "Boy With Drum" indeed! She hung up sharply. Bouser & Baillie looked at each other and then at the canvas in question. Incredible—and yet it *was* the "Boy With Drum"! Or was it? They approached it warily for a closer look.

Meanwhile, that same morn-

ing, another van had parked outside the offices of a similarly distinguished firm of art dealers, Sack, Bonesteel & Woodward. The deliverymen struggled in with a burden quite like the one deposited at Bouser & Baillie, obtained their receipt, and departed.

The crate contained nothing less than Manet's "Boy With Drum." Sack gasped. Bonesteel grunted. Woodward carefully inspected the empty crate for a note, but found none. Had the picture been delivered to them by error? It did not seem so, for their corporate name was plainly stencilled on the crate. Sack gave Bonesteel a significant look. The masterpiece, they knew, was part of the Palumbo collection. Could it be that the Countess had chosen this dramatic gesture to indicate her desire to let them handle her considerable business? After much consultation, Woodward was nominated to make the call, which was effected not five minutes after the Countess had angrily hung up on Bouser & Baillie. *Another* "Boy With Drum"? She flew into a rage and screamed out a variety of Central European epithets, then flung her telephone receiver the full length of its coiled elastic cord, so that as she stomped furiously out of the room, the receiver crept cautiously back toward its table, while



poor Woodward, in London, sat transfixed, staring foolishly at his two worried partners and at the mute painting beyond.

THE following morning, Bouser & Baillie telephoned the leading British authenticator of art objects, Dr. A. B. T. Joll, and politely requested him to visit their offices to have a look at a picture which seemed to be an extremely skillful forgery of "Boy With Drum." It was so skillful, Bouser & Baillie admitted, that it had them baffled. Dr. Joll, foreseeing a plump little fee, readily agreed, and promised to bring his full kit of instruments. Nothing pleased him more than the prospect of detecting a good, sound job of forgery. He had once been termed by the press "the Sherlock Holmes of the art world," which privately delighted him; unfortunately, there had yet appeared no artistic equivalent of Professor Moriarty to provide him with a serious challenge.

He went down to Bouser & Baillie that very morning, and after spending two full hours sniffing and poking the canvas, and making several tests with his own portable super-speed electro-chemical laboratory apparatus, he turned calmly to face the partners, and announced:

"Gentlemen, this is no forgery. It is the original."

Bouser & Baillie were thunderstruck. They did not doubt Dr. Joll's judgment (and with reason, for the expert had never once been wrong); rather, they were horrified by the inescapable conclusion. If *this* were the original, then the Countess had bought a fake—and had bought it on the strength of Bouser & Baillie's advice! They sank into adjacent chairs and sat trembling in silence.

Dr. Joll, meanwhile, examined his watch, found it was nearly time for lunch, and called his office to see if any important messages had been left in his absence. No messages, his secretary reported, but Mr. Bonesteel of Sack, Bonesteel & Woodward had just stepped in on what he said was a most urgent matter. Would Dr. Joll care to speak to him? "Put him on," said Dr. Joll, with Holmesian dispatch.

But he was soon disappointed. "Look here, Mr. Bonesteel," he interrupted, "I'm afraid I can save you the trouble. It so happens, coincidentally, that I've just finished examining the original . . . Yes, right here at Bouser & Baillie. The original 'Boy With Drum' . . . No doubt about it, sir, you have a fake."

Bonesteel was persistent, however, and so Dr. Joll at length reluctantly agreed to stop by for a look after lunch.

His mood underwent a trans-

formation after he had made a cursory inspection of Sack, Bonesteel & Woodward's "Boy With Drum." He frowned, he polished his spectacles, he cleared his throat, and he reached for his kit. One hour grew to two, to three. At last, Dr. Joll stepped back, haggard and shaken, feeling much the same, perhaps, as had Holmes himself, when he tottered on the brink of the Reichenbach Fall in the grip of the criminal genius. A nasty doubt flashed through Joll's mind. Had he been hoaxed by the two firms? Had Bouser & Baillie rushed the original up to Sack, Bonesteel & Woodward while he had been at lunch? That would be preposterous—and yet the alternative was no less confounding.

HE telephoned at once to Bouser & Baillie. Within the hour, the two partners appeared at the offices of the rival firm, carrying their "Boy With Drum" between them. Joll set the two paintings side by side and went grimly to work. It was quite late at night when he finished.

"There is only one explanation, gentlemen," he told the five dealers. "Only one. Manet painted *two* identical versions of 'Boy With Drum'!"

Not until the next morning did the distraught dealers attempt to trace the source of the

two mysterious deliveries. In each case, however, their efforts were frustrated. The delivery firms had duly responded to pick-up calls from unexceptional addresses (one in Kensington, the other near Paddington), and had been paid on the spot by husky young men who had been waiting with their crates at the curbside. It developed further that these young men had not actually been occupants of the addresses in question.

The most stunning blow of all, however, came the following afternoon, when Bouser & Baillie mustered sufficient courage to escort Dr. Joll to Norfolk, to break the difficult news to the Countess. The news proved to be even more difficult than the three gentlemen had imagined, for Dr. Joll's examination of the lady's "Boy With Drum" confirmed that it, too, was the original; or rather, that it was now but one of *three* originals. Other experts were hastily consulted, and their opinions supported that of Joll. Had Manet been seized by a fit of madness which had compelled him thus to repeat himself, not once but twice? Whatever the motive, his performance was undoubtedly the most brilliant technical tour-de-force in art history, for the three canvases were identical, down to the last detail seen under the most powerful microscope.

Manet's fiendish skill did not impress the Countess. She felt that the painter had deliberately outraged her, and she wished that he were still living, so that she might have the opportunity of snubbing him. That being impossible, she determined to snub his work. "Sell it at once!" she ordered Bouser & Baillie. "You told me last year you could get me half again what I paid for it. Then do so now! In fact," she added, to show the selflessness of her grudge against Manet, "I don't care if there's no profit at all—just sell it!"

"Ah, um—" Bouser began. But he found himself unable to speak. Baillie tried, too, with no greater success. How could they make it clear to this dangerous female that the existence of two other originals had placed the marketability of her own in grave jeopardy? There was doubt, indeed, whether any buyer could now be found—at any price. And more than that, if she chose to donate the canvas outright to a museum, would the museum be likely to accept?

While the two partners stood thus uncomfortably searching their minds for some way of phrasing these unpleasant truths, a delivery van back in London was edging into a parking space in front of the firm of John Pickering & Sons, art dealers. Within the van was a crate,

and within the crate was a painting.

It was the fourth original "Boy With Drum."

**B**EFORE the art world had time to digest the incredible evidence of the four identical Manets, the second series of incidents took place.

This time the locale was Rome, and the painting involved was Holbein's famous portrait of the Duke of Kent, one of the ornaments of the Pellagrini Gallery. At half-past ten on a Monday morning, a truck arrived at the rear of the building to deliver a large crate. There was no clue on the exterior of the crate as to its origin or contents, but Gallery officials, assuming that their curiosity would be satisfied by some document tacked within, signed the delivery receipt and had the crate lugged to a store-room. Opening it, they found no such document, only what appeared to be a marvelously clever imitation of their precious Holbein.

They chuckled merrily at the joke. Then one of them remarked innocently that it reminded him of the remarkable Manet duplications which were currently vexing the English. At once a pall of doubt settled over the group. Another Manet case? Utter nonsense! But that afternoon, the Roman counterpart of Dr. Joll

was quietly called in to examine the strange gift. Professor Rienzo was not as swift as his English colleague, and was still inspecting the supposed forgery the next morning, when a different truck arrived with another portrait of the Duke of Kent, just like the first.

Indeed, it was also just like the one that hung so proudly in the Gallery itself—at least that was Professor Rienzo's firm opinion, enunciated the following day at a special meeting of the Gallery's directors. "I stake my reputation on it!" Rienzo declared. "You have now three Holbein Kents, identically the same!"

But Rienzo was wrong. There were not three Kents, but four, for another one had just arrived. The next day, the fifth appeared, and thus, on the day after that, the entire staff of the Gallery waited in a delirium of expectation for Holbein Kent VI. They were not disappointed.

Where had the canvases come from? But, like the London dealers, the Pellagrini Gallery officials were unable to find out. They could follow the trail back only as far as some young man on a street-corner, or in a hotel lobby, or again, at some sidewalk cafe, each time waiting calmly with his crate for the appearance of the summoned truck—then vanishing.

In their agitation, the custodians of the multiple Holbein considered trying to hush up the affair, but they had barely broached the topic when the mysterious donor rendered further discussion useless. Holbein Kent VII was duly delivered—not to the Gallery, however, but to the art editor of one of Rome's great newspapers. The story was out in the open.

**I**N the following weeks, the tempo quickened. No longer were there isolated incidents, first in one city and then in another. The plague of original masterpieces became epidemic.

*Item:* Every art dealer in Vienna received, on the same day, twenty-five different paintings by Picasso, Braque, and Matisse. Each was subsequently established as being fully authentic, to the consternation of those museums and private collectors in a dozen countries who had acquired, at enormous cost, the originals.

*Item:* The Tate Gallery in London was notified by the confused headmaster of a private school near Bath that one thousand copies of a celebrated Van Gogh had been delivered to him, apparently in error. At least, he said, they *seemed* to be copies. He had recalled that the Tate owned the

original. Perhaps the shipment had been intended for the Gallery? The Tate officials grimly agreed that it probably had.

*Item:* One morning, the base of one exterior wall of the Louvre was found to be solidly lined with the "Mona Lisa." There were hundreds of them, side by side, smiling enigmatically out across the Seine, and each, naturally, was as genuine as the single one inside the great palace.

What was perhaps the most serious case occurred in New York. Directors of a famous art museum were notified one day in a letter from a law firm that a wealthy gentleman, recently deceased, had willed to the museum his entire collection of paintings. Would the directors care to appear at such-and-such an address the following day to inspect the offered canvases? The directors wrote a polite acknowledgment and the next day dispatched one of their junior members to the address given. Presumably the donor had left them an attic-full of junk, but still there might be something worthwhile there.

The junior member telephoned his colleagues at once. They hastened to the spot. The collection was most remarkable. It covered every wall of every room in an otherwise vacant five-story

building, and the directors could hardly call any of it junk, for it duplicated with the most appalling exactitude the entire contents of their own museum. Every last painting was reproduced there, and as if that were not enough, inspection of the basement revealed that for each canvas displayed in the rooms above, a precise duplicate existed in storage.

The directors were aghast. It was Manet and Holbein all over again, but on a scale beyond all imagining. To make matters worse, someone had impudently tipped off the press, and there was a crowd of reporters and photographers, not to mention a number of curiosity-seekers who had wandered in from the street. One of the directors telephoned the museum and ordered it closed immediately, but of course that could not prevent the instant collapse of the values of the museum's collection.

Once more, investigation proved fruitless. The law firm indignantly denied authorship of the letter. Someone evidently had purloined the stationery. The dead man, too, was a fraud, having never existed, and as for the person who had rented the building, the real estate agent could recall only that it was a young man named Smith, who had paid in advance weeks earlier, and had not been seen since.

BY this time, the entire art world was in a state of nervous collapse. Dozens of masterworks had been rendered worthless by their sheer profusion. Others joined the list every day. Collectors sought frantically to sell—but no one would buy. Even those paintings as yet untouched by the blight could not be sold, for what buyer could be sure that a hundred identical canvases would not quickly turn up elsewhere? Dealers' offices were closed, museum doors were shut—and most horrible of all, artists were ceasing to paint.

In desperation, the leading museums and galleries pooled funds to hire private detectives. Weeks passed, and the flow of originals continued, but the detectives failed to produce a single positive lead—except for one, and it was so fantastic that the art impresarios angrily rejected it.

One shipment of masterpieces had been traced, through an intricate system of straw parties and other devices, back to the New York apartment of Dr. Cyrus E. Browl. Could the Wizard of Light be the mass-production virtuoso? Ridiculous! Several of the museum directors remembered his fumbling attempts to copy their treasures. It had been pathetic—the old man had been clumsier than the rawest novice, and besides, his eyes were so

weak now, he could hardly see across a room!

But one of the art experts was suddenly struck by the memory of that huge easel and the peculiar array of lightless lamps, and hastened off to pay Dr. Browl a visit. He quickly returned, looking much older, and in an unsteady voice made a report:

"I've seen Dr. Browl—and I've seen it."

"Seen what?"

The dealer's cheeks quivered. "The thing. The thing that does it!"

The art experts all stared at the speaker. "Then he is the one?" someone asked.

"Yes. And he is willing to see us tomorrow afternoon . . ."

THE Wizard of Light occupied the four topmost floors of a mid-town apartment building. Most of that space was used for his laboratories (the city having granted him special permission), from which had issued many important inventions, although none in the last few years.

Dr. Browl received his uneasy guests in a huge room whose far wall, opposite the main entrance-way, was composed entirely of glass. It was, in fact, a gigantic window, which afforded a splendid view of the city.

The art dealers and exhibitors were hardly in a frame of mind to appreciate the scene, however,

as they filed into the room and at their host's direction, seated themselves on chairs and sofas arranged in rows off to one side.

"All here?" asked the Wizard, searching the apprehensive faces before him with his uncertain old eyes. Someone muttered in the affirmative, and the Wizard broke into a high-pitched cackling. It confirmed the worst fears of his visitors. They were dealing with a demented genius who would be beyond the persuasions of reason.

"Now Ill get out my little toy," the Wizard declared cheerfully. He hobbled past them to one of the room's several doors, opened it, and pulled forth his easel, which had been mounted on little tires so that feeble as he was, he could maneuver it around quite easily.

"Looks like a fancy easel, doesn't it, eh?" he chortled, wheeling it out in front of his audience. "Well, it is an easel, but it's more than just an easel! It's a camera, my friends. Not an ordinary camera—oh, no! It's a three-dimensional molecular camera!" He laughed so hard that he was forced to lean against his bulky creation for support.

When he had recovered, he went on more calmly: "I won't confuse you with the technical details, gentlemen. You would hardly understand them anyway. Let me merely assure you that

this camera contains a high-speed electronic scanning device which accurately records in its memory the precise structure of each molecule of matter within its range." With this, the Wizard pressed a button and the front part of the easel, which happened to be trained on the main entranceway, began to purr.

"You recorded the paintings you were pretending to copy!" one of the dealers blurted out.

"Precisely," rejoined the Wizard. "But of course that is just half the story. To record is not to reproduce. Yet my invention is capable of both tasks." He punched another button. The machine stopped purring, and instead, its rear section began to vibrate. "Reproduction!" cried the Wizard, excitedly. "The memorized particles now begin to be duplicated by means of a cybernetic reactor, which with infinite speed and skill, dips into a little reservoir of atomic raw materials, so to speak, and fashions from them the requisite molecules! Thus I produce not merely copies of your vaunted masterpieces, but the masterpieces themselves—complete to the last fragment of aged wood frame and cracked canvas!"

"Of course," he added more soberly, "there are a few problems still to be solved. The reproduction is not instantaneous, but takes several minutes to

solidify. And then, too," he went on, as if musing to himself, "there is the unfortunate circumstance that my pictures will dissolve within a few months, reverting to their elemental state."

HE perceived that his last remark had greatly heartened his listeners, and snapped at them angrily:

"Don't get your hopes up, gentlemen! I shall perfect it, never fear! And in the meantime, I can keep on producing!"

One of the curators spoke: "Why do you want to ruin us?"

"It should be obvious," the Wizard declared. "My object is not to destroy you, but art. Art falsifies nature in general, and light values in particular. It is the curse of mankind. Years ago I decided to eliminate it. But how? The answer, my friends, was not long in coming. I determined to destroy art by rendering it commercially worthless—which, needless to say, I am well on the way to accomplishing!—for I know that in this world, nothing can survive the loss of monetary value!"

The visitors trembled in their chairs. If any proof were lacking of the old man's dementia, his wild statement had supplied it. And was his lunacy, they wondered, to mean the end of their fees and their stipends, and, in-

cidentally, of painting itself? What could they do to thwart the old fiend? Chuck him out the window, possibly, along with his infernal machine.

But the window seemed to be fogged. A peculiar little cloud was whirling in front of it, right behind the molecular camera. They stared at it, greatly puzzled.

The Wizard mistook the object of their scrutiny and embraced his invention protectively. "You want to destroy it, do you?" he cried. "Stay where you are!" He pulled a small revolver from his pocket and brandished it threateningly, meanwhile tugging at the machine, to roll it away.

IT WAS then that Fate intervened, as if the potential irony were too great to be resisted. The cloud behind the camera began to take on a recognizable shape. It became a scientifically exact depiction of the entranceway, in fact, for the Wizard, in his excitement, had neglected to turn off his machine, and it had dutifully gone about its business. True, the representation of the entranceway had not quite solidified, but it was firm enough to obscure the plate-glass window behind it, and so when the weak-eyed Wizard hastily pulled his great camera toward the nearest exit, his confusion was understandable.



There was a loud noise of splintering as the old gentleman propelled his invention through the window, and a cry of vexation as he followed it.

By the time the art experts reached street-level, sixteen stories below, there was little left to be seen. The molecular camera was a mere tangle of wires and metal, yet it still hummed erratically on for a time, and before the astonished eyes of the gathering crowd, it belched out its final and greatest creation—a magnificent melange of all peri-

ods and styles, a triumphant distillation of man's artistic genius through the ages, marred only by the unfortunate representation, in one corner, of a human nose in juxtaposition with the thumb of an upraised hand whose fingers were indelicately spread. However, this minor annoyance was blocked out, and the masterpiece was exhibited in the leading galleries of the civilized world, until, like the machine's other productions, it crumbled and fell into dust.

**THE END**



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# Euthanasia *Limited*

By David H. Keller, M.D.

THE detective in science fiction is a theme big enough to warrant a complete full-length article in itself. Sherlock Holmes popularized the notion of solving crimes by scientific means and other writers theorized that with the advanced technology available to the criminal, crimes of the future might require that detectives be outstanding scientists in their own right.

Arthur B. Reeve hit the jackpot in 1910 when he introduced in COSMOPOLITAN a series of stories featuring Craig Kennedy, "The Scientific Detective." Laboratory techniques were behind Kennedy's solution of most crimes and frequently the crimes involved advanced use of science turning the stories into science fiction.

This approach to the detective story so enthralled the reader that Craig Kennedy's adventures



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by  
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Introduction by Sam Moskowitz



*were even published in sets which sold at best-seller tempo. Other writers were quick to recognize that Reeve had tapped a rich vein of interest and Michael*

*White in 1911 and 1912 wrote a series of stories for TOP NOTCH MAGAZINE built around the ingenious scientific detection of Proteus Raymond. All these stor-*

ies were bonafide science fiction, even involving atomic energy, as such titles as Eyternium X and Force Mercurial manifest.

In 1929, some time after this style had become popular, David H. Keller, M. D. produced one of the most remarkable detectives in or out of science fiction and performed a feat of characterization so extraordinary that it should be studied by every student of writing technique. "Taine of San Francisco" first made his appearance in four related short stories published as a group in AMAZING STORIES QUARTERLY for Summer, 1928 as The Menace. No scientific detective was ever more popular in science fiction magazines than Taine, which sounds unbelievable when one is told that Taine was a "wizened, middle-aged, small man," undistinguished by any special physical or obvious mental attribute, who was so ordinary that it was difficult to remember him minutes after a meeting. Keller brought this unprepossessing character to life by concentrating upon his background and eccentricities. Taine,

most brilliant operative of the secret service was severely henpecked by his wife and two daughters and he bribed his wife with 10% of his earnings to permit him to venture out on his strange assignments. He carried a little puppy around in his pocket which he traded in for a new one whenever it grew too big. His dialogue was one step above an idiot's in its calculated drollness and Taine, a small man dependent upon his wits for survival was quite candid in his fear of getting hurt or killed. Whenever offered a cigarette he always refused with the remark that has become classic: "No thank you, I used to smoke, but I found that the tobacco was bad for the delicate enamel of my teeth, and once that is destroyed, it is never replaced." Close followers of Taine eventually learned that he had a complete upper and lower plate!

This is the detective you will be introduced to in Euthanasia Limited and his acquaintance is an important chapter in the history of the detective in science fiction.

A LITTLE white-haired woman was working in her laboratory.

In spite of the fact that the room was filled to overflowing with a multitude of electro-scientific instruments, there was or-

der and method in their arrangement and the entire atmosphere was one of exquisite cleanliness. Anna Van Why was, without doubt, an ultra-modern scientist, but there were certain inherited characteristics in her nature

which it was impossible for her to escape from. Thus she combined the modern with the past. While she smoked, the ashes and the odor were instantly removed from the room by a vacuum ash receiver, a little invention of her own.

She had arranged the halves of apples in series, thus forming a vegetable battery which produced a potential of over one volt. She smiled to herself as she realized that she was the first human being who had ever approached the problem of life in that way. Before that morning millions of persons realized in a dim way that vegetation had life. She alone thought of the possibility of connecting that life with death.

Even as she was carefully measuring and recording the amount of electric potential formed by these segmented applies, her half brother came into the room. Between the two was a peculiar bond that was both negative and positive in its potentiality. They admired each other in some ways, detested each other in some way, but always there was the strong tie of mutual scientific interest in all of the unanswered questions that Nature has put to a puzzled man.

"The apple is alive, John," she said, as he looked up and saw who her visitor was. "I arrange them in certain sequence, con-

nect them with fine copper wire and obtain over a volt of electrical potential. Does that mean anything to you?"

"Nothing new. We have all known for years that electric potential was a common property of nearly all living matter. Some fishes are veritable batteries, capable of discharging such an amount of electricity that men are disabled and often die in the water before they recover the use of the muscles. Plants have potential electricity; animals have. Did you ever rub a cat's hair in the dark? I never thought of an apple, but there is nothing new in it now that I do think of it. It is simply saying an old sentence with new inflection. Nothing to be excited about, is it?"

The white-haired woman smiled.

"There are two reasons why you are not interested in my apple battery, and both are very interesting. In the first place you see nothing commercial in it. You cannot visualize some new kind of stock promotion to fool your gullible public. The second reason is that it is a part of my search for the real cause and meaning of death. You are too active, too much alive, to be interested in death. It means nothing to you. You only think of it to avoid thinking of it. Am I right?"

The well-dressed man laughed. "Absolutely, Sister Anna. Life is too sweet for me to spend it thinking about the problems of death, and a man has to have money in order to spend it and he has to spend it in order to have any comfort out of life. So your apple battery does not interest me. Go on with your vegetable investigation. I brought a copy of *Vogue* with me, and while you work with apples I will read about the peaches of society and later on we will go to dinner and I will spend on you some of the money I make out of that gullible public you would so like to protect from my ravages."

HE HAD hardly started to read when another visitor came. He was a noted scientist from Edinburgh, and had come across the Atlantic for no other purpose than to see the celebrated electrobiologist, A. Van Why. He was more than surprised to find that she was a woman, for in her publications she had carefully concealed not only all personalities but even her own sex. So they both were surprised—she to think that anyone would be enough interested in her work to make such a journey to see her, and he to find that the scientist he so admired in literature was a little bit of a white-haired woman.

"If you can spare the time,"

he said, after the formalities of the introduction had been finished, "I wish that you would tell me about your investigations into the real nature of death. I have heard that you are almost alone in some of your ideas and that, if they are shown to be true, you will revolutionize our entire biological thought. Suppose you start with the idea that I am just a rather ordinary scientist—in other words, give me a rudimentary lecture on the subject."

"You underestimate your own importance as a scientist, Sir Lauder," Anna Van Why replied. "No one knows better than I do your remarkable contributions of electrical biology. If I do as you wish me to, it will be more with the idea of politely complying with a request, than to acknowledge any inferiority on your part. However, make yourself comfortable and I will see how elemental I can make the lecture.

"A second after death occurs there is practically no difference in the body. The dead body is practically similar to the living body, just as the charged battery is similar in structure to the discharged battery. Only something has happened which makes us say that the person is dead. For over thirty years I studied this problem of death to see just what phenomena happened that could

be held accountable for the change called death. All the peculiar phenomena I found were the result of death, rather than the actual cause of the cessation of life. All my studies in the circulation, respiration, blood chemistry, acid-alkali balance, failed absolutely to reveal the actual cause of death.

"Finally I approached the question from the standpoint of conductivity. I found that, as death approached, the central nervous system decreased while the liver increased in conductivity, and there were, at the same time, the changes one would expect in the electrical capacity of the bodily cells. But even here I felt that we were simply observing a fact instead of actually finding a real cause of the cessation of life.

"But I could not give up the idea that in some way electricity was connected with all the changes comprehended under the two words, life and death. There was no value in the study of the varied associates of death, such as hemorrhage, injury, infection, insomnia, anaesthesia, asphyxia, surgical shock, the removal of vital organs. There must be some single factor back of and accompanying these myriads of complicating accessories. I knew what happened in all of them—the living structures, the individual cells, were unable to

hold together and began to disintegrate—I knew this happened. What I wanted to know was why it happened.

ONE of the primary rules of biology that I accepted many years ago was that all life was governed by the same rules. In applying this rule to our problem I would simply state that in all living things the reason for life and the cause of death are the same for all. If an apple lives, it lives for the same reason that a man lives. The causes that kill man, also kill apples.

"With that rule in mind I again approached the problem of death. I now was able to have an unlimited supply of experimental material, without any opposition from the anti-vivisectionists. They did not care how many apples I used. So I worked with a great many different objects, all of which I thought could be called alive, in the same sense that man was alive. When I did this I satisfied myself that all life, plants, animals, fruits, have a certain electrical potential that can be measured during life, and which drops to zero at death. All that the supposed causes of death did was to decrease the potential. Irrespective of the name—anaesthetics, insomnia, poisons, injuries, freezing, boiling, or a hundred other forms of fatal complications—

all that happened in every instance was this change in the potential. There was just one important fact to be considered and that was the difference in the potential of the nervous system compared to the other systems of the body.

"Our work with insomnia was interesting. Perhaps you know the old system of torture used by Chinese. The prisoner's head is shaved and he is seated on a chair and held there so he cannot move. Above is a pail of water and from that pail a drop falls every minute on his hairless scalp. In a few days he dies. Hour after hour he has remained awake waiting for that drop to fall every minute. In our experiments we have found that insomnia reduces the potential of the nervous system to zero, at which point death occurs. If, however, just before zero is reached, the organism is permitted to rest and sleep, the potential climbs up from zero and the life of the individual is saved.

THE two forms of life that we did the most experimenting with were the apple and the amoeba. First let me tell you about the apple. We feel that it is alive. It was not only alive, but it breathed, consuming 3 to 4 cubic centimeters of oxygen every hour. Thus we had a second method of studying the life

phenomena of the apple, one being the determination of its electric potential and the other its ability to consume oxygen. We had previously performed experiments on the rabbit and dog with adrenalin and temperature changes. We repeated these experiments on the apple and obtained identical results. For example we could anaesthetize the apple, producing first a rise in the potential and an increased metabolism and then a continual fall to a zero point, where we had no potential and an absolute cessation in respiration. When the potential reached zero, the apple rapidly began to disintegrate—in other words, to rot.

"We invented a little apparatus to measure the potential of the apple. In perfect health this was about fifty millivolts. The idea of fruits inspired me to see if I could make a battery and this combination of half apples and wire on my table is the result. From it I obtained a potential of over one volt.

"With these facts in my possession I told my students that we were prepared to continue the same experiments with a form of life that we felt was really ancestral, the one-celled amoeba. One of my girls, a tireless worker with the microscope, finally perfected an electrode so fine that it could actually be inserted into the living amoeba as it lay under



the microscope. We were now able to do three things. One was to measure the potential as we had the apple and all other forms of life, the second was the ability to withdraw the electric force from the amoeba and the third the ability to charge the amoeba with electricity. In other words, we were able to measure, decrease and increase the potential and all under the keen eye of the observer at the microscope. We performed most of these experiments with the Amoeba Pelomyxa, a large type that often attains a diameter of one-sixteenth of an inch.

ITS potential often reached fifteen millivolts. This potential changed when adrenalin, anaesthetics and sodium iodide were added to the liquid in which the amoeba was suspended. We could measure the change in potential under these various conditions by means of the little electrode which we placed inside the body of the one-celled animal. When we increased the potential by electrical means was decreased, the movements became less active and the body came together in a quiet mass. When zero was reached, the amoeba disintegrated, first into large and then into smaller granules and finally became actually dissolved in the surrounding liquid. That, we felt, meant real death.

WHAT did it mean? Simply this. We were able to produce every phenomenon of death simply by reducing the potential to zero. All the other factors, which we have been considering as the causes of death, simply do the same thing, namely, reduce the potential to zero. Therefore we feel that we have at last reached the point where we can say that death is caused by the reduction of the potential to zero.

"But, if at any time before zero is reached, we reverse the current and increase the potential, then the amoeba resumes its active stage and continues to live. That, in a few words, Sir Lauder, is the result of our studies of the very interesting phenomena of death. Have you any help for us? Any criticism? Would you like to see an amoeba under these circumstances come near death and yet live again? Or would you like to see an apple breathe?"

"This is all very remarkable, Miss Van Why. The most interesting thing to me is that practically every statement you have made has been known to me for some time, but I could never put the facts together so as to enable me to arrive at any logical or valuable conclusion. You have the divine touch that makes the dry bones of science alive and vital. I have an idea that your lecture can be commercialized.

As I understand it, all of your fruit is brought enormous distances in iced cars. No doubt the expense is great. Yet in the constantly revolving wheels under the cars you have a potential source of electricity. Why not let me make a little invention, so that these fruit cars can be constantly charged with electricity generated by the revolving wheels in contact with brushes and thus, as the potential of the fruit is constantly maintained, it will reach the consumer in a perfectly healthy condition. If you have no objection, I will patent this idea and see if I cannot sell it to the parties most interested. I will make you a fifty-fifty partner. What say?"

THE little biologist laughed. "I have always heard that you Scots were canny and apt to pinch the penny. You come here to learn about death and almost before I finish, you see the way of adding to your fortune. Go ahead and success to you. Money does not mean anything to me, except to give me additional resources to finance my experiments. I notice that my little laboratory girls like it; they rave over every increase I am able to give them. Suppose you have dinner with my brother and me. We might be able to increase our potential, if we put some steak into our gastro-intestinal tract."

DURING the entire lecture, John Van Why had apparently continued to read his copy of *Vogue*. In reality he had paid the closest attention to every word his sister had said. He had not only listened, but there had been some very rapid and intensive thinking. However, he was a charming companion at the dinner table and in every way confirmed the oft-repeated statement of his sister, "that when John wanted to be nice, he could be very nice indeed."

The next week John Van Why was a constant visitor at his sister's laboratory. There was a great attempt on his part to learn all there was to learn about the potential of the amoeba and apple. His studious attention pleased and worried his sister. The year before, a week of such activity had been followed by a prolonged debauch, and Anna Van Why was too keen a psychologist not to realize that in certain respects the behavior of her brother was, to say the least, abnormal.

Finally he had mastered the delicate technique of every experiment. He had studied the amoeba and exhausted the possibilities of the apple. Even a few rabbits, a dog, and a calf had succumbed to his scientific zeal. Then his enthusiasm died down; he ceased to work hours every day, and to all appearances re-

sumed his former indolent habits. But he did not get drunk. His sister was more amazed than ever. Had she known what was really back of all his efforts to learn her technique, she would have been more than surprised.

JOHN Van Why belonged to the Paint and Powder Club, one of the most exclusive and peculiar clubs in New York City. It was seclusive as well as exclusive, but at the same time there was an interesting bond among the members. It was not a bond of extreme sociability, either. Two interesting stories were told, which illustrated the exclusiveness of the membership and their relations to each other. The oldest member gave a dinner in honor of the youngest member. When asked why he had done so, he replied that he had been a member of this club for over fifty years and this young man had been the first member to offer him a cigarette. The other story tells of an old member who had gone into the reading room and died there. He was dead for three days before anyone knew it, because of an unwritten law which forbade anyone from speaking to, or in any other way disturbing the meditations of, a member in this room. No doubt both stories were greatly exaggerated, but they were often repeated and much

enjoyed by the entire membership.

Back of the eminent respectability of the club was a sinister shadow. It was a prerequisite that each member be in some way a criminal, a deliberate law violator. But he must be clever enough to preclude any possibility of ever being caught.

At the time John Van Why became interested in the potential of amoeba, a large majority of the membership of the Paint and Powder Club were bootleg specialists. In other words, they were specialists in the sale of every commodity whose sale was forbidden either by state or national law. Alcoholic beverages of every kind, narcotics, erotica in literature and dainty femininity, all provided the club members a reason for belonging to the club that specialized in providing society methods for enjoying themselves. John Van Why was considered one of the most brilliant members of the organization; his peculiar gifts as a biological chemist enabled him to support himself in more than one twisted method. And this was the peculiar bond between the membership, namely, the fact that every one of them should have been behind the bars and, while each one knew enough about the others to put them all there, up to the present time not one had ever been sen-

tenced, for a part of the solemn obligation of membership was a sacred promise to commit suicide if the coils of the law ever threatened undue publicity and exposure of any particular member.

It had been over six months since Van Why had thought of anything new in the way of boot-leg industry. His fellow members chided him with the fact and accused him of growing old. It was therefore with a feeling of keen enjoyment that he entered the club one evening and asked a few of his special companions in fashionable crime to join him in one of the private card rooms. While the room was well protected against eavesdroppers, still Van Why was careful to talk in a low voice.

"How about forming a new company, gentlemen? There are five of us. Would you care to put in twenty thousand each?"

The general answer was favorable, provided the company would pay.

"I am sure it will pay," Van Why assured them. "Do you think that I would invest that much if I didn't see several hundred per cent return in the next year? Of course I won't give you the details. Some of you would not understand them if I did, but here are the simple facts—"

He talked for over two hours and at the end of that time the

company was formed. It was decided that the stock should be paid for in cash at once and that every member of the company should start at once as a salesman.

"And if you work it right," said Van Why, "we will have plenty of business."

IT WAS exactly a year later than Anna Van Why had an interesting caller. He was none other than the Chief of the Secret Service of the City of New York. This department was so operated that only a few knew of its existence, and no one except the Governor and the Mayor of the city knew who was at the head of it. However, the chief, with a fine sense of human value, made no effort to conceal either his name or his position from the little biological chemist.

"We are in trouble," he said, "and the big part of our worry is that we do not know enough. About eight months ago the first of a peculiar series of deaths occurred in New York. Later on there were a few similar deaths in other of the large cities, but most of them have been in New York. There is something odd about these fatalities, something so mysterious and strange that the best of our physicians and pathologists are absolutely at sea. The fact is that these persons have died without any real

cause for doing so. We heard that you knew more about death than almost anyone else, so I decided to come and ask you for help. Will you give it?"

"Certainly. How many cases are under suspicion?"

"Twelve that we have quietly investigated."

"Any complete autopsies?"

"Yes, and one by Bruner. You know, he is the best pathologist in the State. On three cases there was a complete chemical examination to determine the presence of poisons. We found nothing; absolutely nothing."

"In any of these cases was there any reason why the person should want to die?"

"That is hard to answer. Some of the men seemed to have everything to live for. In other cases, there might have been reasons, family trouble, threatening financial failure."

"Did you consider a wave of suicides?"

"Yes, but when a person kills himself he generally leaves some sign. He must use some means which will leave at least a trace of its action."

"That is true. Of course, in the East, the mystics die simply because they want to."

"We are not in the East. These men are Catholics and Methodists, and do not show, either in their lives or education, even the remotest knowledge of any pe-

culiar types of religious cults."

"A final question. Here are twelve deaths. Is there any one fact that is in any way common to all of them or half of them?"

"Yes, so far they have all been men."

"Anything else?"

The Chief thought a while—

"Perhaps this may interest you. All were over fifty and wealthy."

"Part of it does. When a man reaches that age, he either wants to live or he wants to die. If he is wealthy he wants to live. Death to a wealthy man at that age is very unpleasant."

"Death is always unpleasant."

"I cannot agree with you. At times it comes as one of the greatest blessings man can ask from the gods. Will you do me a favor? Send me one of the best operators you know of; give him funds enough to handle any emergency and let me work on this problem with him. For the time being, forget that there is a problem. But if you ever hear from us, act quickly?"

"What kind of a man do you want?"

"A brilliant man, who looks as though he did not know very much."

"Those are hard to find. The poor lookers are usually the poor doing kind. I will see what I can do. Will you send us regular reports?"

"We are not going to send you anything till we are all through."

"That is unusual, Miss Van Why."

The little lady grew cold. "I thought you came here for help? Take it—or leave it."

"I see. How about your charges?"

"Pay your detective. I am a biologist, not a crime-hound."

The Chief laughed. He had to. Then he asked one more question: "Do you belong to the book-a-month club that specializes in detective stories?"

"I do not. I still have enough intelligence to select my own literature."

And that was the end of the interview.

SOME weeks later, in fact so much later that Anna Van Why had nearly forgotten the incident, a card was brought to her by her secretary. It had simply one word on it—

TAINÉ

"Who is he, Elenore?"

"Blest if I know. Just looks like an ordinary, dried up, middle aged man to me. He said that he had an appointment with you."

"If he had, I have forgotten it. Send him in to my private office."

She found that the man was indeed very ordinary, middle aged, small and dried up. He was almost as small as she was.

With the ability acquired through long years, she looked the visitor over very carefully for a few seconds before she spoke.

"Well, what is it? This is my busy day," she said.

"My name is Taine, madam."

"I got that from your card. What can I do for you?"

The man simply handed her another card. On it the astonished woman read:

*"This is the man you wanted."*

"I don't want any man," she exclaimed. She had, for the moment, completely lost sight of the conversation of long ago with the Chief. "What were you to see me about? A position as janitor?"

"I guess I will have to tell you," the man said with a sigh. "I thought probably you would recognize the name, but since you don't, I will have to tell you. Some weeks ago you asked the Chief of the New York Secret Service to send you a detective that was brilliant and at the same time looked like an imbecile. I am the man. Taine, from San Francisco."

ANNA Van Why flushed almost pink.

"It was not as bad as that. I never said anything about looking feeble-minded. What I wanted was a rather ordinary looking man who was a brilliant detec-

tive. I remember it all now. The Chief wanted me to help him on an investigation that had him puzzled. So you are Mr. Taine. I wonder why the Chief sent to California for an operator?"

"Because he could not get the man he wanted any other place."

The biologist began to laugh.

"Excuse my slang but you don't hate yourself very much, do you?"

"Sometimes, but here is the way it is with me and the Chief. Three years ago I was offered that position, and I did not want it, so I recommended another man for it and that man is the present Chief. Naturally he feels under obligations. He used to work under me."

"Just why did you refuse? That is the best position of its kind in America—at least so it seems to me."

"It is a good position, but we have lived in San Francisco for a long time, and my wife has been President of the Ladies' Aid Society in her church for the last twelve years. She just about runs it. She had an idea that if we moved to New York, it would take her a long time to become acquainted in the church—so she says, 'Let's stay here where we are known.' Besides, there are a lot of Chinamen there and I like to work with them."

"I see."

"Let's get started with our

work. Just what do you want me to do?"

Didn't the Chief tell you?"

"Not a word."

"All right. Then we can start from the beginning. There have been a number of mysterious deaths in New York and you are here to find out about them."

"Good. Tell me about them."

ANNA Van Why told him all she had learned from the Chief.

As he listened, he looked every bit the dull man that the biologist had asked for. So true was he to the type, that the biologist was annoyed, and ended by saying sharply:

"I trust you have been paying attention."

"Yes, ma'am. I have been listening to you talk; but so far you haven't said anything."

"What do you mean?"

You have not given me a single point to start with."

"That is your business."

"I see. Now tell me this: Why are you in this game?"

"For years I have studied death. The Chief heard this and came to me."

"And you told him to send a detective to you?"

"Yes."

"What did you want with the detective, Miss Van Why?"

"I thought—it seemed to be a job for a detective"

Taine smiled conservatively.

"I believe you are right."

"Of course I am right."

"Suppose you tell me what you have learned about death."

So she told him about her amoeba experiments.

When she finished he looked more foolish than ever. At last he said: "It all seems very interesting, but how do the amoeba feel about it?"

And that was the final straw. She decided that the man must be either fool or a liar. Surely such a dumb mind could never have qualified for the position of Chief of the Secret Service of a great city like New York. As far as she was concerned, the conversation was ended, but Taine did not seem disposed to go.

"I would like to see one of those amoeba," he said.

"I will have my assistant show you some," the biologist said rather curtly. She was beginning to be thoroughly bored with the man. "I am so busy that I have no time to spend with you myself."

**T**AINE had a thoroughly good time with the assistant. In a few minutes he was chatting with her as though they had known each other for years. And before he left, he learned that a man by the name of Sir Lauder of Edinburgh had once visited the laboratory and had listened

to a lecture on the potential of apples. He found out something else.

He went back to see the chief.

"How did you like Miss Van Why?" that worthy asked.

"You ask her how she liked me. She was so impressed by my dumbness that she actually became annoyed with me. However, I am ready to get to work and the next time you hear from me I will have something to tell you. Do me a favor. 'Phone to the little lady and tell her that you had made a mistake; that you were going to use a local man, and that Taine was going back to San Francisco. She will feel happier to know it and I do not want her to bother me in any way. She is very much of a woman and you know they are peculiar in some ways. She will be delighted to know that I was sent back to San Francisco as incompetent. Now suppose we go over the case as far as you have the details."

The two men were closeted for over three hours. At the end of that time Taine left, with the simple request that if he ever called for help, the chief should not waste any time responding.

"Because," said Taine, "when I ask for help, I sure need it."

**I**T WAS some months after that talk between the Chief and Taine that a young bootlegger of



the alcoholic type took John Van Why into one of the private card rooms at the Paint and Powder Club.

"I have a chance to make a killing for every member of the club, John, if you go in on the deal with us."

"Meaning what?" was the disinterested reply.

"Meaning at least a million for all of us."

"Applesauce."

"Not at all—the real thing. I have felt some of the gold. I ought to know."

"Some new kind of graft? Bootleg? Vice? There certainly cannot be anything new. If any outsider came and told us something new, I would be ashamed of our membership."

"I admit that. This is nothing new in a way, but it certainly is new as far as the business side of it is concerned. This old chap can give every one of the boys pointers in his particular line of bootleg. He is a veritable mine of information in regard to all of our specialities."

"What does he want?"

"A chance to put his proposition before us. Says he will make us all millionaires if we listen to him."

"Why didn't you listen?"

"He wouldn't talk. Said he wants to entertain the membership at a banquet, when he will give us his entire program."

"Well, suppose we all go?"

"That is not the point. He wants to entertain us in the club."

Van Why frowned.

"That's different. You know the rules. No one not a member can pass the front door."

"I know that, but you are Chairman of the Rules Commission. You can secure the necessary permission."

"Is that all you want?"

"Absolutely."

"All right. I was afraid you had something else up your sleeve. Go ahead. Tell him to throw the banquet. You are sure you understand him? He's going to give us each a million?"

"Not give it to us—make it possible for us to earn it in a short time."

"That's about the same thing, if the time is short enough. Get word to the members and have them all here. If it is a good thing for one, it is a good thing for all, and you know our obligation. Tell him that as the Chairman of the Rules Committee I ought to have a bonus for letting him in."

"He appreciated that and sent you this piece of jade. Said it was an inferior kind of present, but would you accept it. You need not be bashful. I got one just like it and sold it yesterday for ten thousand."

"You made one mistake, Amer-

son," said Van Why, "You should have told him I was twins and needed two. You attend to the details and I will see the boys."

TWO weeks later the banquet was given to the thirty-nine members. That was the entire membership. Their boast was that they would be equal to the 40 Thieves of Bagdad just as soon as they found a man bad enough to be worthy of the last place. Naturally, that finishing touch was never given. The thirty-nine members and two Chinese guests made forty-one at the table. They were seated twenty on each side, with the host at the head. He was most wonderfully clad in stiff silken robes, heavy with gold thread and encrusted with jewels. At times he talked in Chinese to the interpreter on his left; at times he was silent; but always he kept his fan slowly moving in his hand. The other Chinaman was in European dress, and in every way appeared to be enjoying the evening.

It was evidently one to be remembered. None of the members of the Paint and Powder Club, not even the most blasé, had ever spent one like it. From the finding of the presents at the table, from the drinking of the first cocktail, to the rendering of the last act of an ultra-Parisian cabaret, no effort was spared to

adequately entertain every one of the Nine and Thirty Thieves. And when the end came, the food was cleared away, the servants had departed and the doors were locked; every member was unanimous in the declaration that Ching-Lee or What'sisname was a prince of a good fellow and no mistake would be made in electing him to membership.

Then the smaller Chinaman stood up and started to talk. He explained that he was private secretary to his master, who was a great man in China. He was not worthy to repeat the thought of this great man but as no one else in the audience could understand the Chinese language, it would be necessary for him to act as interpreter. His master would say a few words and then he would translate them. This would take time, but he was sure that they would be repaid in the end. There might be a little difficulty in putting all of his master's thoughts into fluent English, but they would, no doubt, excuse him for any grammatical blunders.

With this introduction, the Chinaman at the head of the table without rising, started to talk in his native language. After a few minutes he paused and that much of his speech was repeated in English. After eight pauses he came to a final pause, and this is what he said:

MOST illustrious and wonderful merchants of the Western World. I feel that I am unworthy of eating with you or venturing to address such a noble gathering of upright and successful business men. You will pardon my audacity in presuming to sit with you at the same table. From far away China I have come, learning of your wisdom and success in life.

"It is my hope to begin business dealings with you which will be worthy of your illustrious attention. For some years a group of merchants in China have undertaken, in a small way, the varied business which occupies your time. These merchants have thought it wise to elect me their president. By a spirit of co-operation we have been able to assume control of all this commerce in the East. Last year we did a total business of over two thousand million; in your business circles this would appear small, especially the profits of twenty-three per cent of the gross, but we felt that it was very fair.

"With the hope of increasing this pitiful success, we decided to ask the great men of the West to become our partners and we therefore have in mind a new company, the western office of which will be in New York City. We need more than a few men to join this company, all of them

being expert in this particular line of trade. I have therefore suggested to my Board of Directors that we give these men, each one of them, five millions in stock, and in addition a present of one million in gold, if they agree to our proposal. I have the stock certificates downstairs; also the gold. As I felt that some of you would prefer paper, I have a number of millions in United States bonds and large bills. If we can come to terms, I will transfer this to you tonight.

"It is not fair to ask you to join without having a definite idea of our resources. First is our control of the opium and morphine trade. We are soon going to have the entire trade in our hands and have unlimited facilities for placing it in any part of the world. That, with cocaine, forms a large part of our pitifully small business. Then I know that you are interested in alcoholics. My association has the names of over thirty-five thousand of the big bootleggers in the United States. We have each man card-indexed. We know his habits and the extent of his business; we know his customers. If you join us we will promise you that inside of three months all of those thirty-five thousand men will either be dead or fleeing for their lives. Our control of the Tongs in your

country makes this promise easy to keep. Once these men are dead, some of you who are specialists in this line will assume charge of this wonderful industry, which your remarkable country has so energetically fostered by your most wise laws.

"No doubt some of you are interested in the fair sex. We control the sale and use of women in the East and there is no reason why we should not, by the same business methods, control it in the western hemisphere. As you know, most of the men engaged in this business are rather timid in their speculations, but with men of intelligence interested, the entire business can be run on an honorable and highly profitable scale.

LIKE all of my countrymen, I am interested in fine jewels and precious stones. It is a shame that these are kept from your countrymen by the high tariff. All that will be changed under the direction of our new company and the evasion of unjust taxes will constitute a large part of our profits. This phase of the business of the company will be in the hands of those of you who are best suited by past experience to handle it.

"We will also control the bootleg business in fine books. What a sad commentary on your peerless civilization to think that

there are so many books that cannot be bought openly in your shops. I feel that, as far as culture is concerned, we are doing your populace a great favor in making the books, illustrations and art of past and present ages easily available to the collector and lover of this form of art.

"Thus we come to you with gifts in our unworthy hands. We have been able to succeed, but we need your help. We wish to establish the control of euthanasia, which is sadly needed in our own country. No doubt the lives of you glorious sons of the West are so carefree that you need no such word in your vocabulary, but in the East, life at times becomes impossible, especially for our business antagonists. For centuries we have experimented in this form of trade, but feel that all of our methods are ancient and antiquated compared with the brilliant form your wisdom has lately discovered. We bring you everything from the East and only ask that you allow us to take back this wonderful secret to our needy friends."

THUS came the end of the address. The secretary spoke of his own initiative:

"And now, gentlemen, you have heard the master. At each place you will find a little pencil and a little card. If you will sign

your name and your specialty and your willingness to become a director in this new company, I will be glad to send for the gold and stock certificates. They are downstairs waiting for your disposal, thirty-nine million in cash and for each man five million in stock. You can form your own company and elect your own officers for the western half of the combine. I assure you that my master is able to keep his promise in every way."

There was a hasty conference, a babble of low whispers, but at the end thirty-nine signed pledges were in the hands of the secretary. He went to the locked door, unlocked it, gave an order to the waiting servant and went back to his seat. Soon five men staggered up, carrying baskets filled with greenbacks and gold coins. The gold coins were in canvas bags, but the secretary opened one of these on the table and out poured twenty dollar gold pieces, like so many marbles out of a sack. He took them by handfuls and tossed them over the table.

"Look at them, gentlemen; the genuine article."

"Well, give us our six million," demanded one of the men almost hysterically.

"We will be glad to do so, but first we must know the wonderful secret of your new method of euthanasia."

"What does he mean?" asked a man to his neighbor.

But that man walked around to the back of John Van Why's chair.

"You have to tell him, John."

"I am not going to."

"You have got to!"

"I won't!!"

The controversy attracted the attention of all. Finally the two Chinamen whispered. Then the secretary arose.

"The condition of this entire agreement," he said, "was that my master take back with him the priceless secret of euthanasia, which was discovered by one of your members. I believe the name is Van Why. It now seems that the gentleman does not wish to contribute this secret toward the good of the new company. Under these circumstances my master feels that the negotiations are at an end, and expresses his profound regret that the new company is impossible. He requests me to have the thirty-nine million carried to a place of safety."

And he started to the door. A dozen excited men blocked his path, another dozen surrounded Van Why, imploring him to act in a decent, sensible manner, while others forgot that the dignified Chinaman did not understand a word of English and excitedly told him that he would be given any secret the club possessed.

A MID the confusion, the dignified Oriental never changed his countenance, never lost a stroke of his fan. He gazed on the surging club members as though they were shadow men on the silver screen. He hardly looked interested. Finally Van Why called for silence.

"I'll give in," he said. "I had a good thing and I wanted to hold onto it, but I see that it is for our good to listen to this man. So you boys stay here, and I will take the two into my bedroom and tell them about it. Don't touch that gold till I come back. You will kill each other if you decide to try and divide it. Come on, you two men, let's get through with it."

The secretary muttered a few words to his master and then the three left the room. The remaining thirty-eight men looked at each other with anxious drawn faces.

"My word!" exclaimed one of the men. "What did they give us to drink? This has certainly been a night to remember." He suddenly drew his revolver and pointed it at one of the men. "Stop! Hands off that gold. When one gets it, we all do."

Twenty minutes passed and then another twenty and an hour. They were all seated now around the table, smoking. Suddenly the door opened and a group of policemen rushed in.

"Everybody! Hands up!" ordered the plain clothes man at the head of a squad of police.

"What's the charge, Officer," asked one of the calmest.

"Talk to headquarters," was the reply.

"I have always said," was the man's whispered answer, "that they would never get me alive." No one seemed to hear him, but he put a ring in his mouth, bit on it and in thirty seconds was dead. The other men, less brave or more sane, according to the viewpoint, filed sadly out to the waiting wagon. One of the last of them looked pitifully at the baskets of gold and paper money.

"Say, Officer," he begged, "you're not going to let that lie around loose, are you?"

The inspector laughed. "That's all right. Just stage stuff."

AN HOUR later Anna Van Why was awakened by her telephone.

"This Miss Van Why? This is Police Headquarters. Sorry to tell you your brother John is dead. Yes. Hit by a taxi on Broadway; no signs of injury, but he died at once. Must have suffered a fractured skull. No, he was not drunk. Only an accident. Seems he was trying to get an old lady out of danger and got hit himself. We sent the body to Morgan's Parlors till you decide what to do."

The little white-haired woman stayed awake for the rest of the night. Over and over she said to herself, "I am so glad that he died sober: I am so glad he died sober trying to help the poor old lady; I am so glad—so glad—"

It was not till morning that she started to cry.

The next morning at ten a little insignificant man called at the unmarked office of the Chief of the Secret Service.

"I am through, Chief," said Taine. "I want to report and go back to San Francisco. Wife writes that there is going to be a Church Social of some kind and thinks I ought to be there. You know she is the president of the Ladies' Aid Society and every once in a while she makes me go with her."

The chief smiled. "How often I have heard that line. Forget it and tell me what happened, because I am just about bursting with curiosity. What shall we do with those thirty-seven crooks you had us pinch?"

"Let your judgment be your guide. Here is a signed confession from every one giving his name, his special line of bootleg and his willingness to join some kind of a society for the further promulgation of vice. There is a card here for each man. One man killed himself, but the others were too yellow. I fancy your men will be able to identify most

of them and you can handle them as you wish. They had nothing much to do with those peculiar deaths you asked me to investigate. These here men are just extra fish that got into my net."

"But how about the deaths? Have a cigar while you tell me."

"Thanks, but I never smoke. Nicotine hurts the delicate enamel of the teeth and once that goes they soon decay. Ever hear that line before? Well, I will save your life by telling you briefly what I did. Anna Van Why was the key. She knew more than she wanted to know, only she didn't know it. I found out from one of her assistants that the dear old lady had given a lecture on a new cause of death to an Edinburgh man, Sir Lauder, and that at that time the half brother, John Van Why was there. It seems that John was brilliant and bad, while the sister, Anna, was brilliant and good. Same father but different mothers. So I investigated John and found he belonged to the Paint and Powder Club. That was just a name for a den of organized vice of every kind. In your cells you have as sweet a collection of degenerates as was ever collected. No vice without its representatives there, and every one claiming to be a perfect gentleman.

I FOUND they were all bad and that some of them were poor.

So I sprang some parlor theatricals on them and they fell for it. I got Sam Lee, a pretty good Chinaman I know here, but dumb as they make them, to pose as a rich mandarin and I went along as his private secretary. I told Sam I would give him fifty bucks, so you add that to my expense account. Well, I gave them a good strong line and at the end offered to make them millionaires if they would give me the secret of their euthanasia, which means painless death. Of course I was shooting in the dark, but the secret came out. John Van Why had been doing the stunt and they knew it. John didn't want to tell, but the others forced him, so we went to his room. There he sat down and told us that he and three others in the club had formed a company, called EUTHANASIA LIMITED. He furnished the brains and the machinery and the others brought in the trade. He said that there had been sixteen killed so far at twenty-five thousand each. A few of them had made their own arrangements because they were tired of life, but in all the other cases the arrangements for the death had been made by a wife or child to enable the heirs to inherit the property. I do not want to take the time telling you about it, but Anna Van Why had found that every living thing had what she called a potential,

a definite amount of electricity of some kind—and you take this potential from the amoeba—that's a kind of bug, Chief—or from an apple, or rabbit or man and they just die. So John, he invents a Morris chair and when the person sits on it, the electrical apparatus in the cushion somehow reduces this potential and he just dies there, in the chair, and the family thinks he died of heart failure or something. Rather cute idea. I told him point blank that I did not believe him, so he says, "Here is one of the chairs, and shows me just how it works. At that, I pull my gun on him and tell him he is under arrest. He is, of course, rather horrified and asks if he can sit down for a few minutes. I never think a thing and what does he do but sit right down on that chair and turn on all the power and in five minutes he is dead. Died before I realized what was killing him. I sent for the policeman I had stationed at the nearby phone and they pinched the gang. Then I had the undertaker come for John and the other man that swallowed the poison, and then I thought of that poor sister, so I phoned her and told her John was hit by an automobile while he was trying to help a poor old lady, and that he was a brave man and not drunk when he died. That will make her feel better and I gave



that story to the press, so of course he is a hero. And there won't be any more mysterious deaths—at least not that kind. Can I go home, Chief?"

The chief looked at the little insignificant man with awe.

"You are a wonder, Taine," he finally said. "You are sure a wonder. What do we owe you?"

"Whatever you think is right. My wife takes ten per cent for

her society so the more you give me the better off the church will be. You send me a check. But please don't ever tell Miss Van Why what really happened. She is one nice old lady, even though she did think I was a fool."

That day marked the end, not only of the Paint and Powder Club, but also of Euthanasia Limited.

THE END

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FOR some time, a magazine which shall be nameless has been featuring the peregrinations of a pun-minded time-and-space traveler yclept Ferdinand Feghoot, whose adventures are told by one Grendel Briarton.

By an enormous coincidence—which we would not permit any of our authors to use as a plot gimmick—the Editors of AMAZING have come into possession of a series of adventures experienced by a space-and-time voyager named Benedict Breadfruit, and indited for posterity by one Grandall Barretton, who took a solemn oath as a young man never to tell a lie nor to make a pun.

It is with pride and pleasure that we bring to you now the first adventure:

### **Through Time and Space With Benedict Breadfruit: I**

ON the ancient planet of Phogiu II, the natives were in a terrible tizzy. Their local god—a huge, intelligent lichen which covered a fifth of the habitable surface of Phogiu II, was dying. Naturally, they sent for Benedict Breadfruit. He took one look at the lichen and said: "It is obvious that the fungi part of this intelligent symbiotic organism is in good health. The other part, however—"

He gave it a shot of vitamins and a chlorophyll pill. The Great Lichen immediately spruced up and began delivering its deep pronunciamientos with the proper punctilio.

"What was wrong with it?" asked one of the natives.

"Nothing serious," said Benedict Breadfruit. "All it needed was an algae buttress."

—GRANDALL BARRETTON

*Few science fiction stories manage to combine astonishingly new ideas in other-worldly creatures and an unusual insight into the sociological problems of dealing with them. But Mr. Aldiss puts together a BEM and a conscience in . . .*

# *Tyrants' Territory*

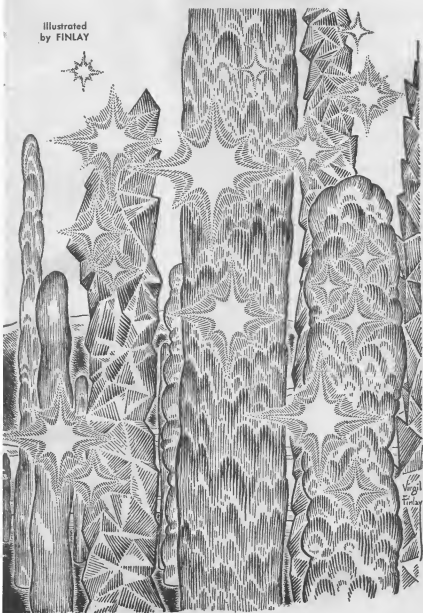
By BRIAN W. ALDISS

FROM the heavy and turbulent cloud layers of Askanza VI, rain fell solemnly. It pattered on

the roof of the overlander making its way down into a coastal valley. Craig Hodges, sitting at



Illustrated  
by FINLAY



Finlay  
1914

the wheel, nodded reflectively to himself. If he and his Planetary Ecological Survey Team (PEST for short) passed this world as safe for habitation, future colonists would still have plenty to worry about from the weather alone. Askanza, the sun, never broke through VI's clouds.

Craig smiled. He had little sympathy for colonists at the best of times. All his affections went to these unexplored planets on the fringe of Earth's ever-expanding spatial frontiers. Each of them, however luxuriant, however barren, presented its own special problem and guarded its own special secrets.

Bumping its way down a mile long slope, the overlander came onto a plateau. From here, but for the rain which now gave signs of abating, there should have been a good view ahead. Craig stopped on the edge of the plateau, peering forward. He was reluctant to leave the advantage of high ground without knowing what he was going into, particularly in a coastal region. Coasts were focal areas for life on almost any planet, and a lifetime of PEST service had taught Craig caution.

Craig was not exactly anticipating anything momentous in the way of life on this moonless, tideless, grassless ball; still, any form of anticipation could be misleading on a new world.

The dwindling curtains of rain parted, dimpling away across an expanse of grey water. So Craig got his first glimpse of the sea, and his first surprise.

From the quiet face of the waters rose tall and thin pillar-like structures. Irregularly spaced, they varied in height, and rose from a few yards off shore to about a mile out to sea.

Adjusting his binoculars, Craig studied them with interest. In the glasses, the pillars glinted with a diversity of subdued color. Some were opaque, some semitranslucent. Their surfaces, as far as he could make out, were by no means regular. Some looked sharp-edged and geometrical, some haphazardly ragged, some rounded. Some were as much as fifty feet high.

Pleased speculation filled Craig. Here was something he had not met with before—a man could ask for no more than that. On first sight Askanza VI had threatened to be dull; now he knew it would not be.

THE PEST ship had landed several hours ago on a high tableland beyond the mountains through which Craig Hodges had driven. Craig and his two colleagues, Barney Brangwyn and young Tim Anderson, made their usual preliminary ride-around before splitting up. They had seen little but barren land,

curious rock formations, some stunted trees and a large number of surprisingly symmetrical boulders; Askanza VI was no beauty spot. Then they had separated to take up their customary positions eighty miles apart at the three corners of an equilateral triangle, Tim staying by the ship, Barney and Craig moving off in their overlanders.

Thus did the PEST work. Briefly, their job was a two fold one: to discover if a new planet harbored any species which would unduly menace the farmers and other colonists; and—if such a species existed—to suggest how it might best be dealt with without destroying the ecological balance of the planet. Time had shown that the most economical way of making the necessary observations was to have three trained men sitting eighty miles apart from each other, interpreting what they saw. Old exploratory methods of hacking one's way round a planet until one eventually blundered into trouble had been superseded long ago.

When he had made a careful survey of the pillars, Craig put down his binoculars. He estimated one to every seventy-five square yards of shallow sea, but their irregular placing made it difficult to be accurate.

Now most of the rain had cleared, and for the first time

Craig saw into the valley below him. It was full of moving creatures!

Climbing out of the cab, Craig jumped down and went forward for a closer look. He was now almost the required eighty miles from base, so that this busy valley might well be regarded as his Plot for investigation. Fantastic rocks outcropped from the ground as he descended. As before, there was no plant nor flower anywhere, nor even a blade of grass; although a few mosses grew by the rocks. The heavy clayey ground ran right down to the water's edge.

WHEN Craig found a suitable vantage point down the slope, he stopped to observe, raising the glasses again to his eyes.

From the complex nature of their activity, the creatures might be reckoned to possess intelligence, although it was difficult to decide what they were doing. At the far end of the beach they had raised a high earthwork which looked unmistakably like a defense. The creatures themselves varied in size but not in shape. Craig mentally labelled them turtles, for it was to that reptile they bore most resemblance with their huge carapaces and flipper-like extremities. From the chunky shell, six limbs and a

head protruded. One pair of limbs were legs and feet, another arms and hands, while the intermediate pair served the intermediate purpose, being used sometimes to handle objects, sometimes to be walked on. Their heads were large and clumsy, with one eye and a beaky mouth. The mouths, as Craig could see, contained big teeth. Since these creatures when erect stood about five feet high in their armor plating, their total appearance was formidable.

Many of these turtle-like beings worked about a structure which was a baffling mixture of rock and metal. Others were parading about the strip of beach. Some dug in the ground, some stood as if in contemplation.

At a sound behind him, Craig turned.

He saw now that the outcropping rocks he had passed had been hollowed out on their seaward side for some depth. Turtles were coming out at him, moving fast, some on two legs, some on four.

Seen this close, they were daunting. For all their speed, they looked enormously heavy. Their flippers, thick and closely scaled, would have been capable of felling a man. They charged at Craig with snapping jaws, a small bony antenna flicking on

their foreheads. Craig did not stop for a second look.

A few of the creatures who came charging out bore cup-like objects in their flippers. As Craig turned, the first cup was thrown at him.

It came hard, flung with force and accuracy.

Craig dodged and it shattered on the ground nearby. He slipped on the clayey slope, and began to run back to the overlander as fast as he could. The turtles were after him. They made no cries, but already other turtles were hurrying up from the valley. They moved fast, jaws snapping.

The overlander was only a few yards away. As Craig reached the door, one of the cups struck him on the shoulder. It broke, splashing liquid over his uniform. He whirled; the turtle who had thrown it was almost on him. Reluctantly, even in the heat of the moment, Craig pulled out his gun and fired. The shot caught the creature full in the breastplate and bowled it over backwards as Craig swung himself up to safety. Gunning the engine, he backed away. Another fiercely flung cup struck the door as he did so.

SWINGING in a wide arc, Craig began to head his vehicle for the slopes. His shoul-

der was burning painfully; he ignored it, so angry was he with himself for his carelessness. He had fallen into the elementary error of anticipating Earth-like behavior from an Earth-like creature. These things which looked like turtles had a ferocity and certainly a turn of speed unknown to the beings they most nearly resembled on Earth.

The overlander reached the foot of the mile long slope and stopped, its wheels slithering in mud brought down by the recent rain. Cursing quietly, Craig switched to caterpillar, shutting down the drive as the retractable tracks came into position. As he opened up again, there was a grinding noise outside while the vehicle lurched forward and then fell back again. Something had jammed the tracks. He was stuck.

Another attempt to move on dual drive failed.

Leaning half out of the cab window, Craig saw that one of the turtles was wedged with its shell broken between the track plates. Its feeble movements awoke compassion in him, even as he cursed it, for he would have to dislodge it before the overlander would move again.

He jumped out hurriedly. This turtle must have hung on and taken an uninvited ride, or it would have been left behind with the others. It was too bad

for all concerned that it had attempted to meddle with the tracks.

Grabbing a crowbar from an external kit locker, Craig levered at the creature's shell. His shoulder was painning him badly. The main body of turtles was now only a hundred yards away, coming up fast. To add to Craig's troubles, night was coming on, Askanza's dull light thickening into dusk. The planet had an eleven and three quarters hour long day, which meant only about six hours of daylight in these latitudes. Not, Craig thought, the happiest of places, even for colonists.

The injured turtle gave a creaking groan as Craig applied pressure. Its shell was formidably tough and would not budge, locked as it was between plates and against a drive wheel. Craig could see he would need a sledge hammer to break it up. He climbed back into the overlander: there was no time now to do more—the other turtles had caught up with him again. A minute later, some fifty of them were grouping round the vehicle. They hammered and slapped against it until the interior echoed with sound. The light was exceedingly bad now; Crain switched on an upper searchlight to see what was happening outside. Certainly the light rattled the turtles. They

hurried out of the beam but did not retreat far. In the reflected light, their eyes glittered emerald green. Their antennae flicked about alertly.

THE overlander was, among other things, a mobile fortress. Craig could have wiped out every creature present by half a dozen means, but killing was not to his taste or his policy. He sat for a moment high up in the cab, watching to see what would happen next.

Obviously the turtles were curious about the vehicle. They were hostile, yes, but something more than mere blind hostility directed their actions. On the edge of the gloom, they waited now with the impatient patience of reasoning beings.

Grunting with the pain of his shoulder, Craig retreated into the small room at the back of the cab. If they disliked light, light they should have. Pressing a wall stud, he sent an arc light rising ten feet above the overlander's roof on a telescopic leg. When he switched on, brilliance poured in through the windows at him.

With a pounding of flippers, the turtles retreated again, some still flinging cups against the vehicle.

"Splendid!", Craig said, and retired to the lab to treat his shoulder.

It was red and blistered, from his collar bone down to his elbow. A simple test satisfied Craig that he had been bombarded with a fairly strong solution of sulphuric acid. He annointed himself, bandaged himself, and went to view his visitors through the overhead blister.

The turtles kept their distance in a ring some forty yards off, milling about impatiently.

"I'm still within acid-cup throwing range," Craig said to himself.

He loaded the flare rifle, setting its timer to fire every fifty seconds and its altitude at two hundred feet. As soon as the first flare burst overhead, he climbed outside with a sledgehammer.

Green light bathed the land as the temporary star burned viridian-fierce overhead. While the turtles fled from the brightest light Askanza VI had ever seen, Craig got to work, hammering at the wedged carapace. He was dragging the last chunk of shell from the track as the third flare went up. By now the unfortunate turtle was dead. Taking up its great head and a chunk of shell and body, Craig climbed back into his vehicle once more, switched off the flare rifle and arc light and started moving.

The overlander responded



without trouble now, dragging itself easily out of the mud and heading up the slope. As it did so, the turtles closed in again and began to follow. Their persistence was impressive.

Ignoring them, Craig climbed the slope. Glancing at his watch, he saw it was time for his group call with Tim and Barney. He had, of course, no intention of returning to the ship. His Plot had its little problems; but it was problems he was here to investigate.

AFTER driving half a mile, he halted and switched on his overhead arc again. In three minutes, the first of the pursuing turtles thudded up, to stand at a respectful distance outside the circle of light.

By now it was almost completely dark, the stuffy unpunctured darkness that had covered the face of Askanza every night since it was created.

Craig went below to the wireless, turned onto Frequency Modulation and called Tim. In a short while, both Tim's and Barney's voices came through, Tim quiet and deferential as usual, Barney full of bounce.

"Nothing very exciting to report here," Tim said. "No life at all visible, except through a microscope. Well, that's not strictly true; I have found a worm fifty millimetres long!

How fortunate that a day so dull should be so brief. I've occupied myself taking soil samples and borings. The crust of the planet is loaded with ore. Its mineral wealth will make Askanza VI an industrial bonanza in a decade, heaven help it. Seems funny to think of the millions of years of peace it's had, and in ten years time it'll be lusty and brawling with materialism. . . . It's been pouring here ever since you two left, a steady acidic shower—I've kept figures, since they vary slightly from hour to hour."

"Just as well the ship and vehicles are fully proofed," Barney grunted.

"Despite that, the soil's okay," Tim went on. "Nature seems to have preferred the inorganic to the organic here, but with implantations of suitable micro-organisms I see no reason why Earth-type crops shouldn't be grown here in a year or two. Rice probably, in this climate!"

"It's dry in this region," Barney said. "I'm sheltered by the mountains, tucked in a valley, and fourteen miles from what the radar shows to be ragged coast. It's been so mild I ate my meal in the open."

"What have you been doing besides eating, Barney?", Craig inquired.

"Since you ask, I've been fiddling with the search radio,

among other chores. As you can hear, our reception at 85 Mc/s is brilliant, but some of the other frequencies are surprisingly congested. There's some curious mush on the short waves—sounds almost like *musique concrete* at times. If nothing better offers itself tomorrow, rather than waste my time here I'll return to you, Tim, and use the ship's radio equipment to chart the various sky layers. If the colonists come here poor guys, they'll need wireless, so a few preliminary findings won't hurt—that is, if it's okay with you, Craig?"

Craig hesitated.

"The sky's not our job, Barney, nor is wireless reception," he said. "If there are no reflecting layers at all topside, the colonists can still use direct wave, as we are doing. Have you found nothing of interest on the ground?"

BACK in his own vehicle, Barney twiddled a curl of his beard round a finger and studiously kept any irritation out of his voice as he replied.

"There are some six-legged things crawling about—look like turtles with large heads," he said. "They seem to move very intermittently, and are sluggish when they do move. Ugly devils, but harmless for all their array of teeth. I'm afraid I just can't

see them in the role of Plimsol Species, Craig. Fodder for Colonists I'd call them, until they all get killed off and eaten."

Craig stared incredulously at his amplifier.

"They . . . drag themselves round on all six legs?", he asked.

"Yes. When I went over to them and kicked them, they retracted into their shells. The heads don't retract, being a bit too big for that. When in that position they look like boulders. What have you been doing, Craig? Seen any boulders walking about?"

"My boulders walk on their hind legs," Craig replied. With typical caution, he kept his report very brief, saying only that he had seen large numbers of the turtles. He made no mention of the fact that he was still surrounded by them, although he warned Barney and Tim about the acid throwing.

"This little habit would be a considerable menace to colonists without overlanders to retreat into," he said.

"You must have hold of a different species there, Craig," Barney said after a pause. "My babies haven't learned to walk upright yet, never mind throw acid. Sulphuric acid, you say? Where would they get that from? You don't suppose they build their own Glover towers?"

Tim answered his question.

"I've found samples of normal salts that would be useful in preparing the acid—barytes for one—but you're not suggesting these creatures have enough intelligence to—"

"I'm trying to avoid suggesting anything at the moment," Craig said dryly.

Recognizing the note in his voice, Barney dropped that line of approach and tackled Tim.

"What do your turtles do, Tim? Are yours vertical or horizontal?"

There was a second's silence, and then Tim said in a strained voice, "I haven't seen any round here at all. . . . Hang on, will you? Something's moving outside. . . ."

HE went off the air. Craig sat where he was, eighty miles away over the mountains, drumming his fingers and trying to visualize what was happening. He knew, with a half-mystical certainty, that any planet was a different place by night from its daytime self; ask any child on Earth and they would say the same thing. The atmosphere changed. . . .

By now the darkness was total. Thunder grunted disconsolately round the horizon like distant gunfire.

Tim's voice came back in a minute, a note of relief in it.

"Hello, Craig and Barney. I've got the turtles too! Most curious. There must have been a crowd of them hereabouts, but during the daylight they were absolutely doggo. I took them for big stones—your boulders, Barney. Now they're getting up and walking about."

"See they don't pinch the space ship," Barney said. "Are yours travelling on all-sixes?"

"No. They're walking on their hind legs—or on their two hind pairs, like Craig's. They're pretty busy, too. Some of them are trying to investigate the overlander. What do I do?"

"Shine a bright light and they'll keep their distance," Craig advised.

"I've all ready discovered that."

"Good boy." Craig had to suppress an urge to be fatherly to Tim; his voice sounded very young over the FM. He could not resist adding, "And don't let them throw acid at you. It's painful."

"Are you keeping something back from us, Craig?", Barney growled. "You're not having some sort of trouble with these critters, are you?"

"You sleep tight, Barney, and don't worry. I'm fine. We'll buzz each other at eight tomorrow morning. Adios and out."

So they closed down. Barney scratched his head, feeling sure

Craig was holding something back. He knew Craig of old. Both Craig and Tim sounded like they were having a more interesting time than he was himself. Promising himself that tomorrow he would go hunting turtle eggs and try a little private research, Barney settled down to read a book.

It was a collection of Conrad's tales. To Barney Brangwyn's mind, only Conrad of all the old authors conveyed the sense of a planet as a planet. He read: ". . . Nothing moved. The fronds of palms stood still against the sky. Not a branch stirred along the shore, and the brown roofs of hidden houses peeped through the green foliage, through the big leaves that hung shining and still like leaves forged of heavy metal. This was the East of the ancient navigators, so old, so mysterious, resplendent and sombre, living and unchanged, full of danger and promise. . . ."

As another sort of 'ancient navigator', Barney knew that what Conrad had written almost exactly six and a half centuries ago contained a true vision of the universe: that behind all the sunlight, however vivid, lay an impenetrable darkness which could be expressed in scientific terms as energy or in religious terms as God. Whatever he or the turtles might do, that dark-

ness remained—yet he could hold that concept in his mind and at the same moment hope to outdo Craig.

**B**EFORE Craig retired to his bunk, he took a look at the creatures surrounding his overlander. They were still outside the circle of light, still active, though perhaps less so than they had been when down by the shore.

He stood for a long while, stolid and unmoving, looking out. The thunder was dying now as night fully established itself.

Craig considered. These creatures seemed to have three different patterns of behavior over a remarkably small stretch of territory. Where he was, by the coast, they behaved like a true Plimsol species; they were active, aggressive, curious. Where Tim Anderson was, their activity was nocturnal only and they seemed slightly less formidable. Where Barney Brangwyn was, they behaved merely like lower animals—like clumsy tortoises. There had to be a reason for this curious deviation, but as yet Craig had insufficient data to uncover it.

Abruptly he turned from the window, and climbed into the cab. Getting into the driver's seat, he started the engine and drove the overlander further up the long slope onto level and

higher ground, until he estimated he must be about three miles from the coast. Then he went to see what the turtles were doing.

Most of them followed the overlander; they covered the ground steadily, if not as vigorously as they had moved hitherto. Many seemed to be suffering from very human bouts of indecision about coming on or going back. Eventually some forty of them grouped themselves beyond the range of Craig's light and sat themselves down to wait.

Shaking his head, he went to his bunk.

The puzzle was still with him. Unable to sleep, Craig rose again after twenty minutes and went to the little laboratory. There he pulled from the deep-freeze the remainder of the turtle who had been caught in the caterpillar tracks and began to dissect it.

He concentrated on the head first. The face was closely scaled with chitinous scales. The antenna was cartilage, and scaleless. The mouth was tongueless, with amazingly strong teeth which scooped sharply forward in the lower jaw. Pulverizing one of them and analyzing the powder, Craig found it to consist principally of iron tungstate and magnesium phosphate. Mineral substances lodged between the other teeth made it clear that these tough little weapons

could be used for digging into softer rocks. A quick examination of the digestive tract indicated that much of the turtle's nourishment also consisted of minerals, broken down by micro-organisms so that they could pass into the bloodstream and nourish the body tissues.

The turtle's single eye was a wonderful organ. As he worked under an optical microscope, Craig recorded his findings on tape.

". . . The turtles have both night and day vision," he said. "Their visibility spectrum must be much wider than ours, enabling them to see into both the infra-red and the ultra-violet. This is of course consistent with what one would expect from a cloud-obscured world like Askanza VI, but it also indicates a species coping with its environment with considerable success. 'Turtle' is a misleading name for these creatures, and I shall hereafter refer to them as pseudo-chelonia\*. We shall then be less likely to underestimate their intelligence.

"Now I am going to open the brain case and examine the brain . . ."

The skull was extremely dense, almost defying Craig's

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\* *Chelonia* is the sub-class of reptiles comprising such animals as tortoises, terrapins, and turtles.

best saw. As he increased revs on the motor, the saw moved faster, biting down into the curving bone. Suddenly there was a loud explosion and the skull cracked.

Craig stopped the motor. Picking up the skull, he examined it. With a needle torch he peered into the hole the saw had made. The report had been caused by an implosion, not an explosion. The pseudo-chelonia had a vacuum where their brains should have been! Dividing the vacuum space, in place of grey matter, were only one or two bony and bare shelves.

Craig stared down in amazement, and the solitary eye stared back at him.

He thought incongruously of what Tim had said over the wireless: "... the millions of years of peace it's had ..." but what sort of peace had reigned in these bony cavities over those long years?

THE dun-colored morning dawned to the tune of more thunder, which died away in half an hour. Craig woke late. He looked outside as he dressed.

Certainly the view was impressive, if bleak. With the rain holding off, he could see some distance in all directions. Behind lay the mountains, rounded and bland. Ahead, the great planes of land sloped down to-

wards the sea, hiding it from sight. All around were only simple shapes, rarely broken by a stunted tree.

The pseudo-chelonia lay silent, like boulders left by a mighty outgoing tide. Only one or two of them stirred feebly.

Grabbing a bar of condensed ration, Craig jumped down onto the ground. He chewed his breakfast as he walked. The creatures spread raggedly. Yesterday's tyrants were today's sluggards; nearer the overlander they were still as stones. Further away, down the slope, one or two moved on all-sixes as if in pain towards the distant sea.

Craig sat on the nearest specimen.

"You certainly have something to contend with," he remarked, tapping it reflectively, "And I think I have an inkling as to what it is."

When he had finished his breakfast, he rose, grave and solid and methodical, to make the group call.

"I could have had turtle eggs for breakfast, only I didn't fancy their metallic content," Barney announced. "I don't mind living off the land, but not when it's so indigestible."

"I could have had some too," Tim said. "I've been up most of the night watching, and I've seen these—what do you call 'em, Craig?—these pseudo-che-



lonia laying eggs in approved turtle style. And then along came three creatures like alligators and made a spirited attack on the egg burial spots."

"Interesting," Craig commented. "What happened?"

"The pseudo-chelonia made a spirited defense. They warded off the alligators with acid contained in clay cups. Despite that, two of them were killed and a lot of eggs taken. These alligators are fast and tough. I was able to film the whole incident for the record."

"Can you see anything of them now?"

"The alligators? No. They made off before dawn. And then

with the light and the thunder, the pseudo-chelonia just seemed to be overcome by sleep. I can see a few of them now, all absolutely motionless, looking like boulders again.

"Ah well, I'm going to bed for four hours."

"We'll be calling you," Craig said. "Adios and out."

He had his day's program all planned.

**A**VOIDING his yesterday's route, he drove down to and then along the coast. The beautiful pillars still protruded from the sea. Overhead, cloud still merged with cloud everlastingly. The pseudo-chelonia were

still active, and thickly distributed along the sea's margins.

Today their activities were more comprehensible to Craig, in the light of what he knew about their habits and their metabolism.

Mainly they appeared to be building—or rather, turning rocks into buildings. This they could do in two ways, dependent on the nature of the rock with which they dealt: either by scraping away the rock with their teeth, or by pouring acid into the metallic veins in the rock and then pulling the uneaten rock away. These proceedings accounted for many of the curious rock formations the PEST had seen.

Craig also knew that much of the creatures' actual food came from the rock. Like plants, they had the ability to convert inorganic matter into the living substance necessary to all forms of animal existence. And through his binoculars he soon observed the skill with which the pseudo-chelonia, beings without fire, prepared their acids, collecting and dissolving salts in little hollowed bowls of rock.

Several times armed parties came up to investigate the man who was investigating them. Craig avoided a crisis by moving on.

At last he came to the raised earthwork he had seen on the

previous day. Unmistakeably, it was artificial, built by hundreds of determined flippers working in organized fashion.

From its look, it might have stood for centuries. Craig did not inspect too closely, since several pseudo-chelonia were inside it. Instead, circling them, he brought the overlander to the other side of the fortification—and here he found the remains of the enemy against whom the fortification had been built. A litter of bones and skulls told Craig he was looking at the end of some of the alligator species Tim had described.

Selecting a fresh skull, Craig stowed it away before driving on another hundred yards to get further from the earthwork. Doubtless this was no man's land between alligator and turtle territory, but it was the first unpopulated stretch of shore he had found. A fast and cold river flowed down into the muggy sea. The pillars that grew here were few and stunted. Craig drove right down to the waterline, hurriedly launched a collapsible boat, and chugged out to a pillar that rose only three feet above the waterline. On his way he picked up a sample of sea water for analysis.

THE pillar was brown with patches of blue, the colors glinting even in the dull light,



and just too thick for Craig to get his hands round.

When he hacked at it with a knife, it splintered easily. In little time, he had the stump of it in the boat and was back ashore.

He had cut things fine. Several pseudo-chelonia were coming rapidly along the beach, flinging themselves over the earthwork and running towards him. Putting the pillar stump and his water sample into a disposal locker, Craig collapsed the boat and snapped it into a side rack. He swung himself up into the cab just as the first creature burst round the corner, flippers swinging.

It took a snap at him. Missing, it took a bite at the overlander instead. For many a long day, the heavy metal of one wing bore the imprint of tooth marks, the most awesome teeth Craig had ever come across. Given half an hour on their own, these chaps could have wrecked the big vehicle utterly.

But now the overlander was speeding off, out of harm's way. Accelerating, Craig shook off any pursuit before stopping in a shallow inland dell to examine the specimens.

As he had long suspected it would be, the pillar was natural, an alien accretion similar to the coral reefs of Earth. It consisted of crystals of metallic salts, iron chloride and copper and

nickel sulphate among others, many of the crystals being abnormally large. It reminded Craig of a 'magic' chemical garden he had grown in water glass as a boy.

His sample of sea water proved to contain traces of many metals considered rare on Earth now, including tungsten and germanium.

WHEN he had made the analysis, Craig sat looking out over the land to the placid sea. The sea on Askanza VI covered five sixths of the planetary surface. Here as on Earth, it had cradled life. Yet here, Craig was now fairly positive, it still held absolute power even over those creatures which had long since left it for dry land.

A man had in him much of the sea from whence he came. Wombed within water, he passed through a fish stage as a foetus; born, he carried all his life a tide in his veins and the taste of salt in his blood. But for all that, he had turned his back to the beaches in a way the pseudo-chelonia could never manage to do.

It was so, at least, if his theory was correct. To prove that conclusively, he needed equipment that only the PEST ship contained. Climbing down to the cab once more, he headed the overlander for home.

RAIN came cascading down again as he touched the hills. It slowed him to little more than twenty miles an hour over the rough, so that another of Askanza's brief days was almost over before he sighted the PEST ship. Nevertheless, the journey was not entirely wasted, since it supplied confirmation that his theory was at least near the mark.

Four miles inland, all traces of the pseudo-chelonia died away. They began again after another fifteen miles; but all the creatures he saw lay face down against the bare ground as if dead, their carapaces shining dully in the yellow downpour.

Donning oilskins, squeelching through the downpour, Craig hurried into the ground lock. Tim Anderson was there to greet him; the young man had seen his vehicle drive up. Something in his attitude told Craig he was uneasy.

"Coming back empty-handed!", he exclaimed as he greeted Craig. "You've not much chance of indulging your favorite hobby of parasitology here, Craig."

"No," Craig agreed. "There's little diversity in the life forms, but the wonder seems to be that anything organic has established itself at all."

As they went up in the lift, Tim said, "Then no doubt you've noticed the life forms seem to

be either large size or microscopic."

"I had noticed—and I notice Barney's vehicle outside. He's back all ready then?"

Tim shot him a veiled look.

"Barney's back," was all he answered.

Barney himself greeted them in the lounge. He was consuming a plateful of canned pork, gooseberry sauce and potatoes, and demolishing a bottle of Aldebaran wine. He waved genially to Craig.

"Beat you to it. Have a drink?"

"Love to," Craig admitted, peeling off his oilskins and stuffing them into a dryer. As he got a glass, the evening's thunder began.

"Everything tied up?" Barney inquired mildly, pausing with uplifted fork.

"What makes Askanza VI tick?", Tim asked.

"By the way you both ask me, I can see you all ready know all the answers," Craig said. "Well, yes, I think I know some of them myself. I'll tell you my ideas, and you can stop me when I go wrong."

"The man's modest," Barney said.

"I admire the resourcefulness of this world," Craig said. "Its conditions are not unlike those on Earth's neighbor planet Venus which—you may remember

from your elementary textbooks—supports no life at all. Here we have at least two tough forms of life, the pseudo-chelonia and the alligator-things, which have managed to evolve despite an almost complete lack of anything but minerals. Minerals there are in abundance, which as Tim says should make this a very prosperous world *if* the colonists move in.

THE earliest forms of growth here—pre-living forms—are crystal accretions, which rise out of the shallow seas like masts. I've seen them along the coast. When I first saw them, I had the impression of wireless masts—and oddly enough I was not far wrong. However, perhaps that is not the right end to begin the story at."

Barney and Tim exchanged glances as Craig went on.

"Let's take the turtles first. They have no brain in any sense that we know of. Instead, they have nature's equivalent of a wireless receiver in their heads. There is even a vacuum in the middle of their skulls, where bony shelves impregnated with metal form a natural triode valve. The alligators function on the same principle."

"They do," Tim affirmed. "I shot one and its brain case imploded."

"Yes. No smaller reptiles exist

because a big heavy head is required to house such an arrangement.

"Their motive power is of course their own. But their—shall we say their thoughts, primitive though they are?—their thoughts are radio waves.

"Life, as we know, develops as it can. We must expect that eventually research will show why these creatures have receivers instead of brains. Nature, however, works with what it has, and here it had a perpetual source of radio emission.

"For me this is the most interesting fact of all. The silent seas of Askanza are gigantic low-powered transmitters. How it works in detail I don't know, although I suggest we find out tomorrow. Roughly, though, the main items would seem to be these. Cold levels of water from rivers etcetera sent up temperature differences in the sea which are transformed into small electric charges. These are influenced by the heavy metallic suspension in the seas. At the same time, the water containing germanium, various depths act in effect as gigantic transistors, amplifying the potential signal.

"The crystal pillars serve as aerials. Day and night they radiate the message of the sea, and the pseudo-chelonia and their enemies pick them up. Do you follow this, Tim?"

TIM shook his head, moving from the window where, as he listened, he had been watching the first motionless turtles come to life with the night.

"I'm with you, Craig, although the way you've deduced all this fills me with wonder and anguish."

"I've only fitted together the facts we discovered—and kept an open mind, remembering the old PEST rule, 'Necessity forms the only basis for comparison between systems.' What we find on Askanza VI is the best possible operable system in the circumstances."

"That's all very well, Craig, but what first started you adding the facts towards the right answer?", Barney inquired. Lighting a cigar, he added, "And don't be afraid to boast. You don't know how oppressive your modesty can be."

Craig smiled.

"Then I must boast on your behalf. You gave me the lead with your remark during our first group call. You talked about the curious mush you picked up on the short wave. That was the call of the sea—calling all life on Askanza!"

"Ha!", Tim exclaimed. He snapped his fingers and started walking round the room.

"Craig, the next bit I pieced together for myself," he said. "What Barney said started me

wondering too, particularly when he mentioned sky layers. Obviously the atmosphere is disturbed; thunder night and morning must mean something. What it means here is that the Appleton or F-layer which normally reflects short waves back to the ground is dissolved during the day. During the night-hours it re-establishes itself. Barney and I have proved this is so with the ship's transmitter.

"Working on the idea that our turtle friends were controlled by short wave radio, I saw this would explain why they were doggo by day and active by night. The signal would not reach them by day, but would radiate into space and be lost.

"Then I asked myself why your turtles and Barney's didn't fit with this neat theory. Directly I thought of locating the transmitter by the coast I had my answer."

"Yes, when you get that far, the rest's a matter of elementary radio theory," Barney said. "The coastal creatures get their transmission direct, so the presence or absence of an F-layer doesn't worry them. Up to maybe three miles inland, the beasts are active day and night, as Craig found. I was on the fringe of a skip area, where the ground wave's given out and the sky wave only reaches under freak conditions—but on planetary

scale, such freak conditions must be pretty prevalent. Perhaps my beasts were explorers, shuffling along in a land where for them thought would hardly reach. Put like that, it makes them sound oddly impressive."

"They are impressive," Craig agreed. "And right now I can hear some of them clumping round the ship. Tim, better switch on external lights before they eat their way in."

**O**BEDIENTLY, Tim climbed up into the cabin and punched the external switch-board. Barney and Craig were watching the pseudo-chelonia scamper heavily for the darkness as he returned.

"It's all clear enough," Tim said, "except for one thing. God, I know it's impressive, this tideless sea broadcasting its message for millenia, and every creature on the planet picking it up. But—*what does it say?*"

Craig spread his hands wide.

"What does the sea still say in your blood, Tim? Something simple in its origin, infinitely complex in its working out; in a word: Survive! The turtles are our brothers in that they are doubtless getting the same message."

For a minute they were silent, each occupied with his own reflections. Craig was the first to speak again.

"There's one further point, Tim," he said. "Just now you mentioned that the pseudo-chelonia were *controlled* by radio. I don't think that is any more accurate than saying that humans are controlled by thought. They seem more to be *guided*, as we are guided; it may sound a subtle difference, but it's a big one. Their movements show primitive signs of individuality: hesitation, for instance.

"Finding out exactly how they behave within their own groups will be valuable work for the scientific bodies who'll follow us. It should shed a lot of light on human impulses."

He stood up, his face clouded.

"And so we've got everything taped. Or have we? We know in outline how the Plimsol species ticks. We know it's plenty tough. It can live on dirt and bite through anything, while I'd say one of those fore-flippers could break a man's leg. But there's only half of our task. Little as I love colonists, I hate to think of them facing up to these armored monsters and buckshot. My prediction is that they won't take long to lose their fear of bright lights. They may be generally doggo in the daytime, but who wants to die at sunset? In short, what recommendations can we possibly make to PEST HQ about dealing with the brutes?"

Grinning, making a rude sign he had picked up in a dive on Droxy, Barney stood up.

"That sounds like a cry to your man of action," he said. "This is where I come in."

Craig emitted a hollow groan.

"Tell me the worst," he invited.

"No, I've something to show you in the control room," Barney said. "While you and Tim were cogitating so powerfully yesterday, I was after turtles' eggs, if you remember. I found I couldn't eat the things, so I hatched 'em in an improvised incubator. Come have a look-see."

HE LED the way up into the control room, smiling as he went. He hated what he had discovered, and he knew Craig would hate it even more; that did not prevent his seeing the diabolically funny side to the whole business.

On the control room floor was a heavy box with a visiplex top. Inside it, on a layer of sand, lay three baby pseudo-chelonia, each measuring about a foot long.

"Good heavens!", Craig exclaimed. "How old are they?"

"About a day old. You've not seen the eggs. They're as big as cannon balls and almost as heavy. The female only lays about half a dozen at a time—

and that must be a pretty painful process. Better her than me."

Barney showed Craig how he had screened off the box, so that even though it was night and the F-layer established overhead, no radiations were getting through to the three creatures.

"Otherwise they'd be biting tunnels through the hull," he said. "Believe me, these babies have milk teeth like buzz saws."

He went over to the transmitter on one side of the room, unhooked an aerial, placed it in with the pseudo-chelonia and returned to the set. He switched on, starting up a music tape.

"Just in the interests of science," he said grimly. "I am going to give these babies a snatch of Debussy's 'La Mer' on their frequency. Here it comes."

Craig and Tim heard the music, damped right down, from the tape player. Barney's babies heard it in their heads. At once they began to move.

They moved uncertainly, like puppets twitched by the hand of a drunkard. First they went forwards, then they went backwards, then they shuffled sideways. Their heads rolled in ungainly fashion. Their six limbs retracted then shot out again. It was horrible to watch them.

"That's enough, Barney," Craig said.

"I'll give 'em a bit more volume," Barney said, twiddling a knob.

At once the pseudo-chelonia were seized by convulsions. They leapt and bucked like unbroken steers, clattering against the side of the box, waving their limbs frantically, wagging their antennae. They threw themselves about like creatures gone crazy, even twisting onto their backs and running into each other.

"All right, Barney, turn it off," Craig said, in a shaken voice. Tim Anderson too looked slightly rattled.

"Those beings are blessed—or cursed!—with intelligence," he said. "Think how they must feel with an alien madman bawling inside their heads."

"Horrid, I agree," Barney said flatly. His three specimens slumped back into immobility as he switched the radio off. Leaving the tape recorder still playing its quiet melody, he got up, returning Craig's straight stare.

"And that's how the colonists are going to cope with our Plim-sol species," he said. "Just a little demonstration for you, Craig. The miners and farmers who touch down here in a year or two aren't going to need shotguns or blasters. They only have to switch on the short wave to burn these critters' brain boxes

out. . . . It's not pretty, but it's simple—and nice and safe. Why are you looking so grim?"

Tim, recovering, slapped Craig on the back and said, "At our moments of triumph, our leader always turns philosophical and sad."

MAYBE you're right," Barney said, leading the way back to the lounge and the bottle of wine. "He will now tell us that we've done our stuff in record time, but that nevertheless we are degenerate. The ancients, he will remind us, had a saying 'to understand all is to forgive all'. And now the PEST motto means something less than that. 'Capite Superare': 'Comprehend To Conquer' . . . Shows how the race is going downhill . . . Have a drink, Craig."

"I will," Craig said mildly, holding out his glass, "when you've finished bullying me."

As the three of them drank, he said, "If I looked grim, it was because I realized something you may have overlooked."

He sat down in a chair and surveyed the two of them.

"After your demonstration, Barney, we can do nothing but send off a report that will soon bring the colonists flocking in. Askanza is going to be a tough planet for a long while. It's going to demand a lot of work from everyone."

"We should worry," Tim said.  
"Yes, we *should* worry! You think the colonists will kill off the pseudo-chelonia by Barney's method?"

"Of course. What else?"

"In no time, one colonist brighter than the rest is going to find a way of broadcasting—not death, but something more deadly—orders. It won't take them long to find out a way either; you know as well as I do what the main sort of colonist is like: he's society's misfit, a reject. How many millions of these tough beasts do you think there are on Askanza? In no time they'll be transformed into a radio-controlled army, working, dying, killing, for a few tinpot tyrants crouching behind transmitters."

BARNEY spilt half his drink down his beard.

He jumped up.

"My God, Craig, you have the nastiest ideas!", he said.

"You think I like them? It makes me shudder just to think of the future of Askanza—but as Pontius said, once I've filed my report it's out of my hands."

Tim gazed fearfully out of the window. Beyond the ring of lighting, the turtles waited for they knew not what. Beyond them was only the blackness, warm and unlit. And beyond that blackness: a deeper blackness.

"Our job's finished," he said.  
"Let's get to hell out of here—and make sure we never come back."

THE END

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# COSMIC BUTTERFLY

By FRANK TINSLEY

**The Stuhlinger concept of a solar powered, interplanetary vehicle, was one of the first, true, spaceship designs . . .**

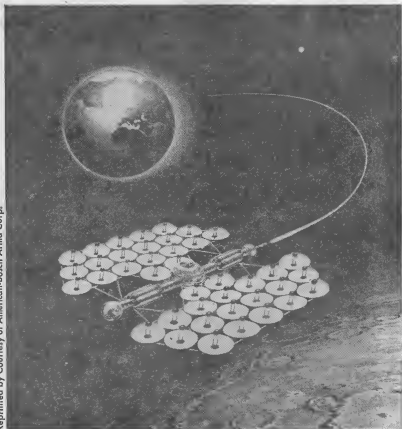
**I**N current usage, the terms "spaceship" and "space travel" are being kicked around rather loosely. Accustomed by now to the launchings, lift-offs and men in orbit, the public tends more and more to accent headline terminology—to think of today's Redstone and Atlas rockets as "Spaceships." Actually, as you and I well know, these outsize fireworks are merely first-stage boosters—cosmic tugboats that lift the exploratory vehicles off their pads and build up their initial speeds. Dropped ignominiously when their part of the job is done, the big pushers almost never rise beyond the earth's atmosphere. As a rule, only the final stage or two of the vehicle ever gets into orbit, and even these can hardly be called "spaceships" with any degree of accuracy.

In time to come, such craft will be dismissed as workaday ferries or local satellites, operating as routine maintenance machines or earthbound observation stations. Only the cosmic Queens, the manned and controlled interplanetary vehicles, will be classed as true "spaceships." To earn that proud designation, they must be independent entities, capable of entering or leaving orbits at will and changing course and destination at the direction of their pilots. Operating only in the weightless, frictionless areas of our solar system, the powerplants of these craft will differ completely from today's gravity conquering rockets, and their unusual forms and design features will seem odd indeed to earth habituated eyes. All our age-old engineering knowledge, predicated on the

weight and strength requirements of our gravitational pull, will have to be tossed aside by tomorrow's spacemen. These builders of the future will have to start from scratch—reorient their ideas to a whole new spectrum of engineering criteria, methods and materials. The problems presented by this new frontier, have intrigued a few of

our more farsighted and imaginative minds and already, a scattering of theoretical spaceship designs have appeared.

ONE of the earliest of these was envisioned by the German astro-engineer, Dr. Ernst Stuhlinger. A leading light of the famous Peenemunde V-2 group, brought to the U.S. after the fall



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of Hitler, Dr. Stuhlinger now heads N.A.S.A's Marshall Space Flight Center at Huntsville, Alabama. Based on his expert knowledge of space physics and experimental powerplants, the Cosmic Butterfly was the first soundly engineered vehicle to develop electric power from solar heat, and employ an "ion engine" for propulsive thrust. This huge machine, named for its plan-form resemblance to a fluttering butterfly, weighs far less than any chemical-fuel ship of its capacity and develops but a fraction of its power. Yet in space, where even the slightest nudge can move a mountain, its overall efficiency is vastly superior.

Back of the Butterfly's unique design is a thorough understanding of the logistics of cosmic flight. Dr. Stuhlinger was convinced that the enormous amounts of fuel required to break free from the earth's gravitational grip made earth launchings far too expensive in ship size, weight and cost. It seemed obvious to him that economical spaceships must be assembled at and launched from a gravity-free earth satellite, and that they must terminate their flights at similar stations orbiting around the destination planets. It meant that the ship's component parts, plus its fuel, supplies and passengers, must first be shuttled from earth to the satellite base—

and that a like ferry system is necessary at the other end of the trip. This set-up is now generally accepted as the most efficient method possible.

THIS point, however, Stuhlinger parted company with proponents of conventional propulsion. If chemical rockets were used on the interplanetary leg, he pointed out, some 170 pounds of fuel must be ferried up to the satellite base for every pound of the spaceship's payload—and each of the 170 will require half a ton of ferry fuel to hoist it through the earth's gravitational field! The staggering cost and difficulty of such a project is apparent. The Doctor considered it obvious therefore, that chemical fuels were out as far as interplanetary cruises were concerned. While technically possible, the excessive cost makes it a poor bargain. Instead, he proposed something new—a combination of the Saenger system of electro-particle propulsion, and Dr. Abbot's solar steam plant as a power source. It has been computed that around a kilowatt of radiant energy falls upon each square meter of space throughout the solar system. Stuhlinger determined to put this free sun-power to use.

His spaceship design, capable of carrying ten passengers, plus fifty tons of cargo, weighs only

250 tons—as compared with 1,100 tons for a chemically fuelled rocketship of similar capacity. Flight time from an earth satellite to one orbiting around Mars is approximately one year. Even more remarkable savings would result on longer journeys. On a two year flight of some 780 million miles the Butterfly would have a take-off weight of only 275 tons, whereas the chemically fuelled job would tip the scales at no less than 7,500! Furthermore, the rocket fuel would have to be laboriously trucked up to the starting point at enormous cost. The Butterfly, on the other hand, would use free solar energy, picked up as she went along. Altogether, it was a rather attractive notion. Let's sign up for a Martian cruise aboard one of these Butterflies and see what interplanetary travel a la Stuhlinger would be like.

HAVING staggered through our tests and had all the necessary shots, briefings and sessions of hypnotic suggestion, we board a Ferryship. Sitting atop a huge, multi-chambered booster, it towers into the air like a slim, silvery skyscraper. Checked through the gantry gates, we ascend in an enclosed elevator, cross a glassed-in platform and squeeze through the ship's pressure-tight hatchway. There is no need to go into the

details of our ferry flight. It is routine and was fully described in an earlier article of this series. So was the wheel-like satellite station at which we land. The trip had all the smoothness of long practice and our cabin aboard the space station left nothing to be desired.

Approaching the satellite on the previous afternoon, we had caught a glimpse of the Butterfly's long, slim body and acreage of shining solar mirrors. Now we seat ourselves in the station lounge to be briefed on the machine's design and operation. Our Skipper, a veteran of the interplanetary service, takes the floor and illustrates his talk with animated movies and a series of breakaway models. After describing the vehicle's general layout and overall design philosophy, he goes on to her unique propulsive system, starting with her basic power source.

This is a space adaptation of Dr. Charles G. Abbot's old solar powerplant, a dish shaped, parabolic mirror that gathers the sun's heat rays and focusses them on a small, spherical boiler mounted above its center. These concentrated rays reach enormous temperatures and water, fed into the boiler's black, heat absorbing surfaces, is instantly transformed into high pressure steam. This is piped to a conventional turbine which, in turn,

whirls a generator and produces electric power. Thus Abbot has translated solar heat into motion and then electricity.

In Stuhlinger's version of the system, a lightweight turbogenerator of 200 kilowatt capacity, is mounted below the mirror bowl. Two disc shaped heat diffusers are placed below it in the cold shadow of the mirror. One of these cools the generator and the other condenses the used steam exhausted from the turbine. The entire power package revolves around a central axle, developing sufficient centrifugal force to trickle the generator coolant and steam toward the outer rims of the discs. On the way, they transfer their heat to frigid outer space and the steam reverts to water. From the rims, both are then pumped back into their closed systems, to be used over and over again. The complete powerplant is made up of forty such individual units, mounted together in two groups on either side of the spaceship's body. In plan form, they resemble the wings of a gigantic butterfly and give the ship its name. Each unit is self-contained and continues functioning even if its neighbors are smashed by flying meteoric fragments. Acting together, they produce a total of 8,000 kilowatts, ample to propel the ship and power its auxiliary equipment.

The electricity thus obtained, the Skipper then explained, is carried to a propulsion assembly at the rear of the spaceship body. This, too, consists of a number of individual units. In each of these, Cesium vapor is introduced into a hexagon shaped, ceramic chamber. There, its atoms strike a grid of incandescent platinum plates, which absorbs their outermost electrons. This leaves a stream of positively charged ions which pass through the grid and into a thrust chamber. Here, the ion stream is accelerated to extremely high velocities by a collar of negatively charged electrodes placed around the chamber's rear nozzle. Passing these, it is discharged in the form of a high speed electrical jet exhaust. This jet propels the ship in exactly the same manner as does the gas exhaust from a conventional reaction engine.

THERE were several serious bugs in Stuhlinger's system, but at the cost of some electronic complication the Doctor eliminated them. First, to prevent the spaceship from building up a negative charge from the split-off electrons, these, too, must be ejected simultaneously and at the same rate of speed as the ions. This he accomplished through the use of supplementary electron thrust chambers, surrounding the ion nozzles.

Then came a second difficulty. Unless the ions' accumulated charge is neutralized immediately upon leaving the thrust chamber, it will tend to repel the following ions in the discharge stream, thus slowing down the overall jet velocity. This is the "space charge effect" familiar to designers of electronic tubes. To counter it, the Doctor crossed his separate streams of ions and electrons and combined them about an inch outside their nozzles. This cancels off the objectionable charge and permits the engine's full designed velocity to develop.

Approximately a thousand of these propulsion units are used, each measuring two inches across. They are clustered in a honeycomb arrangement to obtain the total thrust needed. This is comparatively low—on the order of one ten-thousandth of the force of earthly gravity. In the vacuum of space however, the Butterfly is weightless and frictional drag nonexistent, so even the tiniest push will start her moving, and a continual push will build up a constant acceleration. So unlike chemical rockets which burn their fuel fast and then coast through most of their journey, the Butterfly's thrust is employed throughout the voyage. During the first half, it is used to accelerate to maximum speed. Then, at the halfway point, the

ship's tail is reversed in a 180 degree turn and the thrust, acting in the opposite direction, gradually slows her down and brakes her to a halt.

Having been briefed on our argosy's general form and propulsion system, we are ushered into a small space tender and rocketed out to the ship. Our little craft is hardly bigger than one of the Butterfly's power units and as we chug beneath a wing to reach the airlock in her belly, the expanse of forty-foot cooling discs hangs above us like an endless ceiling of inverted mushrooms. Only a few of them are spinning—just enough, we later learn, to feed the lights and air-conditioning circuits. Arriving at the entry port, our tender locks on and we float up through an airlock chamber and into a large, circular room. I say "float" because with the ship motionless in orbit, we are in a completely weightless state.

A TOUR of the Butterfly's environmental equipment reveals it to be much like the set-up developed for space stations. A system of hydroponic gardens absorbs the carbon-dioxide exhaled by the crew and by the process of vegetable growth, transforms it into fresh, bracing oxygen. The fast growing algae also provide a high protein food additive, with the excess crop

consigned to biochemical fuel cells where they develop reserve electrical power. This plant-propagation gear, together with its allied air-conditioning apparatus, power facilities and shops, are installed in the rear extension of the fuselage, which terminates in the ion engine-room. The cabins and living quarters are forward. Cargo and supply holds, subject to a gradual lightening en route, are placed low and as near the ship's center of gravity as possible.

A few hours after we come aboard, the Butterfly's engines begin to push and the big spaceship takes off according to schedule. Her long spiral flight has been pre-calculated and programmed to the minute, timed to take every advantage of the confluence of Earthly and Martian orbits. The actual journey is uneventful and, toward its end, boring. For the first few days we all relax in an easygoing vacation mood. The constant forward acceleration has restored normal gravity and we laze around the public rooms much as we would in a resort hotel. After awhile, we drift into a round of jobs in our specialties—lab work, astronomical studies, etc. Unlike the explorers of earlier ages we encounter no hardships and our adventures are all those of the mind.

**THE END**

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# THE SPECTROSCOPE

by S. E. COTTS

**The Sixth Annual of the Year's Best S-F.** Edited by Judith Merrill. 384 pp. Simon and Schuster. \$3.95.

Well it's Judy Merrill time again. Her sixth annual is out and it's the longest so far, a whopping total of thirty-four entries as opposed to last year's twenty-two. As usual, I'm faced with an inner dichotomy in knowing how to review (maybe *cope* with would be a more accurate expression) her work. I still admire her willingness to sift such mountains of material while becoming increasingly dubious about just what criteria she uses for naming her choices. I have also become increasingly doubtful about the prime purpose of her endeavor. Is it to show variety, or a cross section, or is it still (as it should be) for the blue ribbon best?

In a summation in the back, Miss Merrill complains about the paucity of good science fiction this year. Yet in another place

she speaks glowingly of the wonderful writing in the British Nova publications. Then why couldn't she have used more of them and excluded some of the more questionable items, or just had a book that was shorter? Instead, this paucity motivated her to range far afield and to include excerpts from an (at that time) unpublished article by G. Harry Stine. Could this not have been saved for next year? How can an unpublished article possibly be included in the year's best no matter what its merit. And why excerpts anyway? This is just one example of what's wrong with this unclassifiable volume, and will give some notion of the reviewer's difficulty in presenting an orderly argument from such unwieldy material. Here are some more of her substitutes: the book has poems (sick and otherwise), cartoons (likewise), songs complete with words and music (again not from any publication though included in the



year's best), non-fiction articles, a book excerpt (for heaven's sake why! that would open a whole new deluge of material), a novellette (in previous years space limits have left no room for such an extended piece), her usual introductions to the individual pieces plus an introduction at the front and a summation at the back (which would be better placed in the beginning), a guest editorial by Anthony Boucher on S-F books during the year (most of his material has long ago been digested in AMAZING'S book reviews with similar conclusions and probably in the other S-F periodicals' book columns as well, and as such is old hat), a list of honorable mentions, and—oh yes—some stories.

This massive listing of contents is not meant as a wholesale condemnation of any individual items, but to suggest that the book as a whole is less a book than a Judy Merrill grab bag, something so permeated with her views, likes, dislikes and momentary enthusiasms as to be almost useless as any reliable yardstick of the year's output. Frequently she justifies my questioning of her choices by her own words. In the introductions to the stories (which are getting too long—sometimes as much as a page of small print to each story), she attempts to tie them together in pairs or trios and to draw some

conclusions about trends in the wind this year. One doesn't need to get very far into the book to wonder at how pat everything seems to be—how one item rolls into the next as if they had all been written for her instead of for the most diverse publications. Some people might interpret this as a sign of Miss Merrill's skill. It is much more likely that after she picked the first few entries, a grand unifying idea came to her, and she tended to pick other items on the basis of whether they would fit in with what had already been picked rather than on individual merit. This sneaking suspicion of mine is not just idle speculation either, for on page 214 she says, "This story ["The Man on Top"] originally published by ESQUIRE in 1951, was reprinted last year in FANTASY AND SCIENCE FICTION thereby barely justifying my inclusion of it here, to complete my Himalayan set of three."

Nor do I believe that it is possible (as Miss Merrill has done) to draw generalizations about the year as a whole from the stories included here. One can subscribe to her conclusion on the basis of her selections (though again I say she might have picked the stories because of the conclusion), but that doesn't prove that it is true of the field as a whole. I disagree strongly that this is the year of the Other

Creature. Many of her stories contain this, but they're supposed to be the year's best and that is light years away from being the most representative. (Think of the best movie or TV program you saw last year and ask yourself if it was representative of the year's output?) The best in any medium often does not partake of any recognizable trend. So again I must be suspicious as to whether Miss Merrill really saw this trend, or thought there was this trend and superimposed this coloring on her choices. I haven't read the year's output of short stories to the extent of Miss Merrill, but for every novel that there was about Other Creatures, there was one about Time, or The Bomb, or our foibles, or just plain exploration, etc.

There are some noteworthy clearings in this jungle, however. Holley Cantine's "Double, Double, Toil and Trouble" is a fine story warning about a rather unexpected result of dabbling in the black arts. Ward Moore's "The Fellow Who Married the Maxill Girl" is a lovely warm tale already included in another anthology. "Something Invented Me" by R. C. Phelan is an understated but chilling narrative about a very ingenious machine. Marshall King's "Beach Scene" is an astonishingly secure first story. "The Brotherhood of

Keepers" (the short novel) is a superior idea with a realization to match. Richard McKenna's "Mine Own Ways" (also previously collected) shows that the pitch he reached with "Casey Agonistes" was far from beginner's luck. And Brian Aldiss' "Old Hundredth" is another of his very own originals, a further reason for considering him among the very best names in the field. These seven stories constitute a sizeable amount of first class work and some of the credit for them reflects off on Miss Merrill. But offsetting these is another group—the vignettes. Many of these are good, too, but almost too good. They sparkle, but with the kind of light which burns itself out quickly leaving no trace or memory. Nearly all the selections from PLAYBOY fall into this category. They are all slick, brilliant, and ultimately empty.

Even the good stories are somewhat jaundiced, however, by the way Miss Merrill intrudes herself on them. For instance, her introduction to Marshall King's fine story contains one of her endless and giant generalizations, thus distracting the thinking reader from what follows. She says that "the perils of exploration attract two very different kinds of men: those driven by curiosity and those drawn to conquest." Her point is most de-

batable. What about those driven to new frontiers by force of circumstance, by exile through economic hardship, religious or political persecution, or by the need to flee some personal problem, or in search of peace of soul, etc.

Ideas (even debatable ones) and enthusiasm (even misplaced) are rare and valuable commodities in this era when the cynics and care-nots have pushed spontaneity and natural excitement into disrepute. But now that Miss Merrill has proved abundantly again and again that she has these qualities, she might do well to direct them elsewhere since they are getting in the way of what is her ostensible purpose: a first class anthology. Why not use all the extra trappings as the basis of a non-fiction book of her own? It would serve a dual role. It would gather together in its proper format the fruits of her long association with, and championing of, science fiction, and it would probably be just as good as Kingsley Amis' *New Maps of Hell*, a book that Miss Merrill should take particular pleasure in challenging.

**MIND PARTNER** (and 8 other novelets from *Galaxy*). Edited by H. L. Gold. 263 pp. Doubleday & Company, Inc. \$3.95.

I have not left myself much space in which to discuss Mr. Gold's anthology, but I do not

need as much. Regardless of whether the stories are good or not, at least they can be examined out in the cold clear light of day instead of having to be extracted from an editorial cocoon. Aside from a short introduction in the beginning of the book, Mr. Gold leaves these selections unadorned. When they are very good, this simplicity makes them even more impressive. When they are mediocre, this plainness makes them easier to ignore.

The current volume contains both sorts of stories—the impressive and the uninspired. The good ones are so nice, in fact, that one wishes Mr. Gold would have delayed publication until he had a whole book of the best instead of succumbing to the temptation to put out a collection at such fixed intervals. Since space is limited at this point, I'll give myself a treat by confining my remarks to the impressive entries. My favorite is "The Hardest Bargain" by Evelyn Smith who has had a warm spot in my heart ever since a story called "The Greech." The current one features lovely ingenuous humor, a choice ending, and the most wistful, woebegone President of the U.S. that our history is ever likely to produce. "The Stentorii Luggage" by Neal Barrett, Jr. contains some amusing notions of the services the hotel of the future may have to offer.

"Snuffles" by R. A. Lafferty is written in a fresh and telling style though it certainly is a bit chilling in its matter of factness. Contributions by Clifford Simak and Cordwainer Smith are good, but they've both done better work.

The element of humor I men-

tioned above pops up in the majority of these novelets (both the good and the mediocre ones), and is a welcome visitor in the face of some of the ponderous and portentous books I receive each year. Maybe Mr. Gold should consider calling next year's offering, *Galaxy Guffaws*.

## 1962 HUGO AWARDS NOMINATION BLANK

20th World Science Fiction Convention

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Please enter my nominations in the following categories. I feel this is the best science fiction published during 1961 and should be considered for recognition at the Annual Hugo Awards Banquet on September 2.

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(Continued from page 7)

ting them in uniforms to do a battle scene, or even to buying up the services of the Yugoslavian army for a similar purpose. It's quite another matter, however, to take these same extras and expect them to realistically portray citizens in some super-Utopia of the far future or enact the roles of denizens of another planet.

Miniatures, mock-ups and technical trickery can assist in the "special effects" department—but in the last analysis, it's the *people* on the screen who count. And here is where the movie-makers run into their time, space and cost problems.

Or, rather, run away from them. As a result, we get a succession of dreary so-called "science fiction" films in which the technical effects can be quite dazzling, but the *people* consist of a limited number of actors of limited ability. You've seen them time and again—the man who's a "scientist" by virtue of the fact that he wears a white smock; the crewcut hero and his crew in the "space outfits" with military insignia, and the inevitable Galactic Council.

THE Galactic Council, for the benefit of those of you who came in late and are just settling down with your popcorn, consists of three or five men in a low-

budget picture or seven men in a high-budget picture; when the hero and his buddies land on this new *papier-mâché* planet, they are conducted to the Council Chamber where these characters sit behind a bare table against a scrim-curtain backdrop. Even in the big, super-colossal "A" film, five of the members of the Council are just elderly extras in white wigs, crepe-hair beards and shapeless robes, which bear a suspicious resemblance to maternity-gowns. During this obligatory scene they sit there but never open their mouths—if they did, it would raise the budget. A sixth member is considerably younger; he sits at the far left, and one look at his heavily-accentuated dark eyebrows and scowl tells us he's the villain. The seventh member sits in the middle (you see, with three or five on the Council, he can *still* sit in the middle) and *he* is the Head of the Council, has most of the dialogue, and also happens to be the father of that beautiful blonde chick in the leotard who is going to come in during the scene, have eyes for the hero, and take him off to "conduct" him through the cardboard caverns and other wonders of this Strange New World . . .

All right, so it's easy to poke fun. All the easier when we, as an audience are constantly and painfully reminded of the fact

that most science fiction movies set in distant futures or on distant stars can offer appeasement to our sense of wonder only in a series of miniatures—but give us nothing but chintz, crepe hair and leotards as accoutrement for the supposedly strange super-beings which inhabit these realms of enchantment.

But this is the very crux of the movie-makers' problems. Good science-fiction, as opposed to fantasy, must carry with it an illusion of *realism*. The settings, the mechanical devices, the special effects often succeed to a greater or lesser degree. But the better the job is done in this area, the worse the characters look, by sheer contrast. One would literally have to create a new world in order to make these people convincing, individualistic, arresting. We can and do believe in the characters in *The Hustler* or *Room At The Top*, because we are familiar with the *milieu* against which they move. But the space-suit boys and the leotard-and-ropes aliens immediately reduce most science fiction films to the level of space-opera; even the plaster-of-Paris "monsters" are more credible.

To properly and effectively mount such a film requires more space and time than the average film-maker can buy.

WHEN we come to the problem of television, the same considerations apply with even greater stringency.

Consider the facts. The average half-hour TV show is shot in just 2½ or 3 days. A one-hour show is filmed in 5 days. Budgets are limited. There is no time for any elaborate pre- or post-production in the form of intricate technical effects. Visually, the results are confined to the compass of a 21-inch picture tube; it's hard to handle mass action or "awesome" vistas.

As a result, science fiction on television is largely confined to stories of borderline parapsychology, and tends to veer into fantasy. There have been "space" series, but the theme is generally limited to variations on *With Uncle Sam On The Moon*.

And like it or no, this is where the situation seems to rest at the moment. Hollywood owns properties like *Brave New World* but can't "lick the story-line"—except in terms of the same old Council of Elders and blondes in tights. There are producers, directors, writers, even actors, with ambitions and inclinations directed towards doing "real" science fiction movies. But first they must conquer space and time . . .

BOB BLOCH

(Continued from page 8)

detective story with a few touches of science in which the stereotyped hard-boiled reporter uses his fists and occasionally his head to fight his way from one thrilling episode to another. "Meteor Strike!" had an interesting attempt at characterization, but Harvey's character was emphasized so often and in such contrived ways that it got boring. Even in such a traditional science fiction setting, the author is not scientifically exact. Since the rim of the station was at a quarter-G, Harvey's magnetic shoes would have to hold him down with a force of say forty pounds for his weight and another forty for the patch. During walking, each shoe would have to be lifted, allowing for a safety factor, with a force of one hundred pounds or more. Rather hard walking! On Schomberg's cover, the men have no life lines. The only reason I can see for this is that if excitement is needed, a crewman can get lost in space. The shuttle would not need any retro rockets to pull the meteor out. To keep the shuttle on the rim of the station would require a force equal to one fourth its earth weight, perhaps a force of a quarter ton!

The profiles are one of my favorite features of the maga-

zine along with the book reviews. In the future, I hope you will continue an expanded book review and will carry long stories and serials whenever greater length is necessary for full development of an idea.

I think that AMAZING STORIES is not and should not be a quality, highbrow science fiction magazine. In the science fiction field, there will always be the need for the more "juvenile" adventure type magazines on which the younger generation of fans can cut their teeth. On this line, you should carry more stories like Chandler's "If the Dream Dies . . ." "Pariah Planet," although somewhat inferior to the other "Med Service" stories, was a typical Leinster action story and passed a few pleasant hours. As long as AMAZING offers good adventure stories like these with no pretensions of lasting literary merit, it will fulfill its own role in the science fiction field.

David Hadaway  
Rice University  
Houston, Tex.

● *Well, I don't know that we like to think of ourselves as being completely without literary merit—but you're right in saying our aim is to offer good entertaining stories without checking out each tiny fact with the experts at the Rand Corporation or MIT.*

Dear Editor:

I have just read the Dec. AMAZING, and have a comment on S. E. Cotts' review of *Stranger in a Strange Land*. I am not sure whether he even read this book. It does not sound like it. I thought the book was superb. For a GOOD review of this book, he should read Buz's col. in CRY #152. That is, if he reads fanzines.

I enjoyed the article on Murray Leinster. I like all of Sam

Moskowitz's fine articles.

The best story in this ish was Sam McClatchie's "Mother America." I hope to see more of his stories real soon.

Dick Kuczek  
2808 S.E. 154  
Portland 36, Ore.

● *Do you want book reviews, or just good book reviews? For my money, S. E. Cotts was lenient.*

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